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Making a Nuisance of a Great Utility!

## Desirable Traits and Qualifications, and Undesirable Traits and Disqualifications of City School Board Members

*From the Point of View of Members Now in Service*

Edgar Mendenhall, Kansas State Teachers' College, Pittsburg, Kansas

About the middle of October of the present school year a letter was mailed to from three to five presidents of city school boards in every state with the request that they list the "desirable traits and qualifications" and the "undesirable traits and disqualifications" of city school board members. The cities to which this request was sent were selected at random from the directory of schools published by the Bureau of Education.

### States from Which Replies were Received

Georgia	California
West Virginia	Kansas
New Mexico	Ohio
Wisconsin	Illinois
Oklahoma	Nebraska
Mississippi	Iowa
Missouri	Oregon
New Jersey	Tennessee
New Hampshire	Colorado
Wyoming	

### Distribution of Cities from Which Replies Were Received

Population	Replies
2,000-6,000.....	5
6,000-10,000.....	7
10,000-25,000.....	13
25,000-60,000.....	2
Total.....	27

The descriptive terms used by board members are so pat that they are given below as received, notwithstanding more or less overlapping.

### DESIRABLE TRAITS AND QUALIFICATIONS OF CITY SCHOOL BOARD MEMBERS

#### Personal Traits and Qualifications

Has high morals.  
Unquestioned character.  
Integrity.  
An optimist.  
Modest.  
A sense of relative values.  
Has a liberal education.  
Courageous.  
Broadminded—fair.  
Friendly, approachable, kindly; shows a willingness to listen to anyone without encouraging unnecessary complaints.  
Talks little.  
Reasonably successful in own vocation.  
Subject to conviction on all subjects.  
Vision—sees the wonderful future of an educated citizenship.  
More or less mature.  
Honest.  
Has integrity.  
Has firmness enough to stand for a principle.  
Mental capacity.  
Has good judgment.  
A general culture.  
A certain degree of self-assurance.  
Not partisan, politically or religious.  
Tactful—gets along with folk.  
Sound judgment of human nature.  
Has business training.  
Has children of his own.  
Respects the opinion of others.  
Open-minded on educational matters.

#### Community Relationships

Public spirited.  
Pride in "home town" and faith in his community.  
Standing in the community.  
More or less a leader in the community and in public affairs.

Never loses sight of the taxpayer who pays the bills.  
Identified with civic clubs.  
Intention to reside many years in the community.  
Represents the best citizenship of the community.  
Regards a public office a public trust.

#### Relations With Board

Punctual and regular in attendance of board meetings and stays until the business of the board is over.  
Considers only the business of the board at its meetings.  
Shows willingness to yield his own views to the majority of the board.  
Is willing to give time to school board duties.  
Willing to serve on committees.  
Takes only his share of the time in discussing school matters.  
Cooperates with other board members.  
Assumes his share of responsibility for acts of the board.

#### Relations With Superintendent, Teachers, and School

Interested in education.  
Knowledge of school systems.  
Gives close study to school needs.  
Keeps abreast of the times.  
Cooperates with school authorities.  
Decides questions on the principle of what is best for the children.  
Monthly visits to schools.  
Gives ready response to every call of the school.  
Refers personal and individual complaints to the superintendent.  
Willingness to delegate all purely administrative matters to the superintendent and hold him responsible.  
Sufficient education to appreciate the work of the teachers.  
Approves only teachers who are sold to the public school system.  
Makes effort to get all the children in school.  
Economical—but not niggardly ideas of finance.  
A working knowledge of budgets and finance.  
Believes thoroughly in the public schools and their place as a democratizer.  
Shows knowledge of school affairs.  
Works in harmony with the school heads.  
Considers the work of the school "in the large" and does not waste his time with small details.  
Frequently visits the school.  
Makes effort to keep the school buildings in a comfortable and safe condition.  
Recognizes that the superintendent can obey and follow only the decisions of the board—not of individual board members.  
Follows lead of superintendent, holding him responsible for results.  
Progressive—for improvements, better teachers, better salaries.  
Sympathetic interest in teachers and their work.  
Has respect for all board's employees.  
Conservative attitude toward such matters as dancing, etc.  
Makes effort to provide ample salaries.  
Sees that the money raised for school purposes is wisely spent.

### UNDESIRABLE TRAITS AND DISQUALIFICATIONS OF CITY SCHOOL BOARD MEMBERS

#### Personal

Disagreeable, discourteous.  
Pessimistic.  
Not successful in his own business.  
A shirker.  
Non-progressive, an obstructionist.  
Shows religious prejudice.  
Too timid.  
Over-sensitive to criticism.  
Narrow minded. Objects to everything not in keeping with his own ideas.  
Too visionary—impractical.  
Vindictive—revengeful.  
Immoral—loose character.  
Unapproachable—brusque.  
No stamina, a weakling, cowardly.  
Too young—immature.  
Stubborn, pig-headed.  
Injects politics—rewards partisan friends.  
In all disputes. Quarrelsome.  
Has former service as a teacher, principal or superintendent of schools.  
Egotistic—knows it all.  
Too talkative. Gossipy.  
Atheist.  
Visionary—a faddist.

#### Community Relationships

Attempts to curry favor with patrons by adjusting their differences with the superintendent.  
Does not stand well in the community.  
Has little influence in the community.  
Plays for popularity.  
Lacks leadership in public affairs.  
Little public spirit.

#### Relations With Board

Criticizes in public other board members.  
Considers his position on the board as an opportunity for furthering his personal interests.  
Not punctual and regular in attendance of board meetings.

#### Relations With Superintendent, Teachers, and School

Out of touch with public school system.  
Meddles with details.  
Stingy. Desires to reduce taxes to the extent that cripples school work. Regards taxes for schools a burden. Exhibits "cheese-paring" parsimony.  
Not generally well-informed, ignorant in general, of school work in particular. Fails to inform himself of all the rules and laws regulating the schools.  
Gives adverse criticism of the superintendent or principal in public.  
Lacks sympathy with the public school system.  
Considers teachers hirelings to be obtained at the lowest possible salaries.  
Takes up personal or individual complaints instead of referring them to the superintendent, not recognizing that an individual board member has no more power than any private citizen except the right to vote at school board meetings and to express his opinion.  
Fails to keep posted at all times of the school's needs. Fails to look after school buildings.  
Puts municipal needs above the needs of schools.

The "desirable traits and qualifications" or their equivalents which were mentioned most frequently are "education, culture," eleven times; "sound business judgment, successful in own business," ten times; "ability and willingness to spare time," eight times; "honesty, character, integrity," seven times; "punctual and faithful in attendance of board meetings,"

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# The Legal Relationship That Should Exist Between the Superintendent and the Board of Education\*

With Special Reference to Illinois

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Everywhere, public school administration has its foundation in the law. The administrative systems devised for schools are a reflection of the political thinking of the people concerned—tempered by the time and place in which they live. In the American states, the will of the people, in the governing of their schools, has found expression through constitutional provisions, statutory enactments, rules and regulations of legally constituted officials and boards, and court decisions.

## Legal Foundation of School Administration

This legal foundation of public school administration has had its origin in two sources: (a) ideas taken originally from the practice of foreign school systems, and secondarily from the older states of our own country; (b) in the local attempts of communities to work out a satisfactory educational program. The influence of the first source is apparent in the adaptation of the French system to Louisiana and of the Dutch system to New York. While the early educational literature of Illinois gives little evidence that the state borrowed directly from European sources, yet there is ample illustration of the influence of the experience of New England, New York and Ohio upon the struggle for a system of free public schools.<sup>1</sup> However, it is to local initiative that we owe most of the development of administrative organization as it affects Illinois city school systems today.

About 1845, a law was passed in this state (Illinois) which permitted school districts to levy a tax for the support of schools. A year later 21 counties reported that one or more districts had availed themselves of the opportunity to levy such a tax. This was the beginning of an era of experimentation. An examination of the *Private Laws*<sup>2</sup> passed by the legislature of 1855 gives a cross section of what was happening at the end of ten years of this initial experimentation. New charters were granted, that year, to 30 different villages, towns, and cities. Twelve of these thirty special acts mentioned schools. Three different plans for administrative control of schools were provided. Eight vested the control of schools in the municipal council or trustees; one made it obligatory for the council to provide for the election of a board of school directors, and another, the city of Ottawa, secured as an amendment to its charter, the passage of an act to establish free schools within its jurisdiction.<sup>3</sup> This was probably one of the best of the earlier special acts governing the control of schools in Illinois cities; and is, therefore worthy of consideration as to fundamental principles.

The Ottawa act made the board of education financially independent of the city council; it established a tax limitation of not less than three nor more than six mills on the dollar, and that the expense of levying and collecting the school tax should be paid out of the city treasury; it provided that the board should elect one of its own number president; and the definition of powers and duties of the board was a model worthy to be followed for many decades. Of 30 municipalities that asked for new charters in 1855, only twelve were interested enough in education to mention schools, and only one pointed the way to the type of school systems we have at present. It was through the experimentation of the special act legislation that

most of the fundamental principles of school administration as we know them today were derived.

The Free School Act of 1855<sup>4</sup> was designed for a rural and pioneer people; yet it was the foundation upon which all of our administrative organizations for city schools has been erected. It was but natural that the boards of education established<sup>5</sup> in 1872, should be assigned the powers and duties previously granted to directors, in 1855; and it is typical of the persistence of legal phraseology to find in the latest edition of Illinois School law the following: "The board of education shall have all the powers of school directors, be subject to the same limitations; and....."

But the law of 1872 did make an advance over previous legislation, in that it granted to boards of education certain powers and duties in addition to those performed by directors. Most important among these was:

"To employ, should they deem it expedient, a competent and discreet person or persons as superintendent or superintendents of schools, and fix and pay a proper salary or salaries therefor, and such superintendent may be required to act as principal or teacher in such schools."<sup>6</sup>

After many years the plural aspect of the foregoing clause was eliminated and the permissive element was changed to an obligatory requirement, so that in 1925 it is the duty of the board "To employ a competent superintendent who may be required to act as principal or teacher in such schools."<sup>7</sup>

It is interesting to note the persistence of the clause, "who may be required to act as principal or teacher." Also, it is worth while to note the gradual changes of another clause of the 1872 law that, if in effect now, would inflict a considerable annoyance if not actual hardship upon board members. This earlier law required board members:

"To visit all the public schools as often as once a month, to inquire into the progress of scholars and the government of the schools; to prescribe the method and course of discipline and instruction in the respective schools, and to see that they are maintained and pursued in the proper manner."

Gradually, as city school systems grew in size such a requirement grew irksome; and, in larger cities, if obeyed in full, would have occupied the full time of board members. It was but natural that boards should "deem it expedient" to elect a superintendent and to delegate their general and specific supervisory powers to him. Through such slow changes has evolved the present status of superintendent and board in the administration of Illinois city school systems.

Before looking to the future it is well to summarize the present attainment. Twenty-seven Illinois cities and villages still operate their school systems under the provisions of special acts;<sup>8</sup> but the right of the state to establish uniform administrative practice has been established. The principle of classification of cities has been recognized in so far as to make a differentiation between cities of 1000 to 100,000 and of more than 100,000 population. City school districts are independent of other municipal control. Each city is required to have a board of education; and the board of education is required to employ a superintendent. Nowhere does the law specifically set up

a dual executive administration, except in cities over 100,000 population and there certain essential functions of the business manager must be approved by the superintendent before they become effective. The principle has been accepted that the state may define both general and specific powers and duties of the superintendent. These principles already established are in keeping with the more fundamental proposition that "education is a state function." On such a foundation of achievement, it ought not to be difficult for Illinois to take such forward steps in school legislation as would place the administrative practice in its city school districts in the front rank of American city school administration. With one or two exceptions, the following proposals are all actually in operation in one or more of the 48 states.<sup>9</sup>

## Urge Abolishment of Special Acts

a. *The special acts governing city, town and village school systems should be abolished; the principle of classification should be extended so as to take care of all the actual needs that must be specified by law.* In making this recommendation it is assumed that it would be adopted only in connection with the other proposals to be made. A careful study of all the special charters now in force in Illinois cities discloses the fact that practically every real advantage, granted through any special charter in this state, should be attained through the revision of the general law governing city school districts. Such classification is already in effect in certain states and has proved eminently satisfactory. No local district is deprived of any needed initiative or power; and the right of the state to protect its children against the misadministration of schools in any subdivision of the state is maintained.

## Reduce Size of Boards of Education

b. *The size of boards of education should be reduced.* At present, in cities over 100,000, the board consists of eleven members, and the board elects one of its members president. In other cities, the board consists of a president, six members and three additional members for every ten thousand inhabitants; *provided, however, that in no case shall such a board consist of more than fifteen members.* The law further permits the electors of each city district to determine whether the board shall be reduced to nine members. Obviously, the law as it now stands is a compromise between the ideally small board and the large unwieldy boards representative of the ward system. The experience of Illinois in limiting the size of its boards is typical of the experience of all the older states. Every size of board, from three members to 559, has been tried in the United States.<sup>10</sup> The trend has been unmistakably toward the smaller board. For 21 cities of the United States that received new special charters between 1910 and 1920, the model number of board members was five and the median number was less than seven. For 44 of the 48 states that specify the size of boards in the general statutes the mode is at five or six. Twenty-two states without exception make the number five or less. Our first recommendation would be that Illinois definitely limit the size of its board to five members. However, if there is any real good to be attained by electing a new president each year, then it might be well to retain a part of the present plan, namely, that the board should consist of a president and six members.

\*Read at the Annual Joint Conference Illinois State School Board Association City Superintendents' Association, Decatur, Illinois, October 29, 1925.



### Longer Term for Board Members

c. *Board members should have a longer term.* It takes time to become a good and efficient board member; it takes more time to establish new policies. The superintendent's term ought not to be longer than that of the board members. Therefore, if the board consists of five members, the term should be five years, one elected each year. If the present arrangement of six members with a president elected each year is maintained, then the term of members should be six years. The longer term will tend to make the voting public more discerning concerning the type of men and women who are elected to board membership and in the end will give greater stability and effectiveness to city school administration.

### Board Should Transact All Business

d. *The law should specify that all business of the board should be transacted by the board as a whole.* The committee system owes its existence to a pioneer era when boards had no paid executive officers such as superintendent and assistant superintendents, and when they were required by law individually or collectively to exercise all the general and specific powers and duties of administering and supervising the schools under their charge. The system continues largely from the force of generations of habit and partially from the inability of large boards to function well unless they are broken up into committees. The passing of the large board and the right to delegate all administrative and supervisory functions to paid executive officers removes the last vestige of excuse for a standing committee organization. Forward-looking superintendents and board members will welcome such action because it conserves time and energy of both parties that can be expended to better advantage than in committee meetings.

### Qualifications of Superintendent Defined

e. *The qualifications of the superintendent should be defined by law.* These qualifications would naturally be defined in the certification law; and such definition would apply only to men and women entering the superintendency after the law is passed. School administration has become a profession—a profession that is both a science and an art. In a day when we talk glibly of a four-year course in a reputable teachers' college as a minimum preparation for entering the teaching profession, it is folly to think of less than one year of successful graduate preparation in educational administration and supervision, plus successful teaching experience as a prerequisite for entering the administrative field. Illinois would do well to write into its statutes that, hereafter, a man or woman to be certificated for a position as city superintendent must be a graduate of a four-year approved college course, and have had at least one year of graduate preparation with a major in school administration and supervision, and at least two years of successful teaching experience. Most of us will live to see the better administrative positions going to men who have gained a much more thorough and far-reaching preparation than here suggested.

### Increasing the Term of Superintendents

f. *The law should permit boards of education to elect a superintendent for a term of three to five years; and legislation should look toward increasing the tenure of successful superintendents.* The day when the superintendent followed the trail "never knowing, though caring much, where each year's tramping would end," ought soon to be gone forever. A superintendent who isn't big enough to fill the job successfully for a term of three to five years should never be employed. All things considered, the success of the school system depends largely upon the vision and the courage of the superintendent. It takes time for him

to develop a program and get it into operation; it takes more time for the program to prove itself. Ultimately, the law should specify that the superintendent should be elected for a term of not less than three, nor more than five years. For the present, it is probably better to start with the permissive type of legislation. Boards will not hesitate to contract with stronger superintendents for the longer term.

In order that the superintendent's work may have greater stability than it has yet possessed, his reappointment after the first time should be an established legal fact, unless the board notifies him on or before six months preceding the expiration of his term that his services will be no longer needed.<sup>12</sup>

### Executive Officers Subordinates

g. *All executive officers of the school system should be subordinate to the superintendent.* This principle has been accepted in Illinois legislation and needs but to be made more general and more effective. All communications between the board and other officials of the school, teachers, or employees should pass through the hands of the superintendent.

### The Superintendent an Official of the State

h. *The legislature should recognize the superintendent as an official of the state, responsible for performing certain specific duties within his subdivision of the state school system.* This principle is already recognized in Illinois legislation by the requirement that, "An employment certificate shall be issued only by the superintendent of schools or by a person authorized by him in writing."<sup>13</sup> Other duties for which the law holds the superintendent specifically responsible in one or more states are: Taking the census, enforcing the compulsory education laws, preparation of reports to the board and to the centralized state educational authority, issuing literacy certificates to new voters, and general supervision of the schools.

### Superintendent Given Advisory Powers

i. *The superintendent should have advisory powers.* The superintendent should have the right to attend all board meetings, except those meetings or parts of meetings, devoted solely to consideration of his re-employment, tenure or salary; and should have the right to speak on all questions before the board, but not the right to vote. The advisory power is the most powerful weapon that can be given to a strong superintendent; in the hands of a weakling it can do small harm other than to retard business. The superintendent is closer to the problems of the school than any board member can be. If he has the right to speak on all questions, his word may delay hasty or ill-advised action. This right to advise is the most essential power that the law can vest in superintendents; and it works to the advantage of the board for it keeps the superintendent on record on all matters pertaining to the welfare of the schools.

### Defining Responsibility for Administrative Functions

j. *In defining the responsibility for exercising certain administrative functions, the initiatory and executive phases should be vested in the superintendent, and all approval phases in the board of education.* Legally establishing such a procedure serves several important purposes; (1) it makes the superintendent definitely responsible for developing a program; (2) it places the final responsibility for all important administrative policies in the board of education where it belongs in a state that trusts control of schools largely to the local community; and (3) it forever removes the question of argument as to responsibility for actually executing the act.

Certain of the more important functions should be defined as follows:

(1) *Appointment.* All appointments to executive, supervisory, teaching, or other positions

in the school system should be made only upon the written recommendation of the superintendent. The board should have the power to delegate the responsibility for appointment of any class of workers to the superintendent, subject only to his reporting his action back to the board at its next regular meeting. The same relationship should exist as to transfers, promotions and dismissals.

(2) *Attendance.* The superintendent through his assistants should be responsible for directing a continuous census, and for enforcing the compulsory attendance and child labor laws.

(3) *Budget.* The superintendent, with the advice and assistance of his subordinates, should be entirely responsible for the preparation of the budget, submitting it to the board for approval, and for formulating any revisions that the board may find necessary.

(4) *Buildings and Grounds.* Sites should be selected, new building plans adopted, and repairs authorized only upon the written recommendation of the superintendent. Subject to the approval of the board, maintenance repairs should be made, the purchase and sale of buildings and grounds should be negotiated, and new construction be supervised by the superintendent or his assistant to whom he delegated the responsibility.

(5) *Curricula.* The various curricula, including the subjects to be taught in each, the time to be allotted, and the credit to be given, should be determined by the superintendent with the advice and assistance of teachers and supervisory officers concerned, subject to the approval of the board.

(6) *Rules and regulations* governing the work of the schools should be prepared by the superintendent with the advice and assistance of his associates, subject to the approval of the board.

(7) *Textbooks and Supplies.* Textbooks, educational apparatus, and supplies should be selected by the superintendent with the advice and assistance of supervisory officers and teachers concerned, subject to the approval of the board. The board of education should have power to delegate the purchase of supplies to the superintendent, subject to the limitations of the budget.

(8) *Supervision.* The superintendent should be legally responsible for the general direction and supervision of all school activities authorized by law or by act of the board of education.

k. *The relationship of the board and superintendent as it affects the public should be defined.* The success of school administration depends upon keeping the public informed, in holding the public's good will. All regular board meetings should be open to the public. Conditions under which special or adjourned meetings may be held should be carefully defined. Minutes of the board should be kept on file in the superintendent's office and open to the public. All official proceedings of the board should be published. The proposed budget, each year, should be printed and distributed to voters and taxpayers, and a public hearing should be held by the superintendent and board. The superintendent and board should keep the public thoroughly informed as to the policies of the school, its condition, its needs and progress. The public through petition of a specified per cent of legal voters should be empowered to bring any question before the board for official consideration.

1. *Any revision of law defining the relationships of the superintendent and the board should take into consideration the relationship of the local city school system to the state system as a whole.* The improvement of facilities for transportation and communication, the more

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# Teachers' Wages From the Viewpoint of Economics

Wm. Estabrook Chancellor  
(Concluded from November.)

What then does control the wage of the teacher?

First and superficially, the total of taxes available from the public treasury for the schools. *Prima facie*, the payroll for the teachers cannot exceed the sum remaining after all other expenditures have been met. But the total of taxes is not a fixed sum; on the contrary, it is under the control of public opinion; and public opinion has a way of increasing taxes at its pleasure. Within the same state, operating under the same laws, cities of about the same population and with about the same amount of taxables, nevertheless pay quite different salaries to their teachers. Neighboring states of about the same per capita wealth, because of differences in public opinion, pay very different wages to their teachers. The total of local taxes is a variable due to public opinion.

Everywhere, there are protests that the local taxes are too high; rates of taxation are too high. In one city, property may be assessed at 50 per cent of market values and the tax rate may be \$2.17 per \$100. In another city, the assessments may be at full market values, and the tax rate may be \$3.80. And the protests against high taxes may be keener and more numerous in the latter city than in the former. Those who deal with teachers' salaries should know whether or not in fact the taxes are heavy. A prosperous city with tax assessments at full value and a tax rate under \$2.50 is not heavily taxed. In such a city with tax assessments at 80 per cent of market values, a tax rate of \$3.15 is not heavy. In most American cities, annual taxes of less than \$150 upon a \$6,000 home are not heavy.

Farm-owners complain generally that their taxes are heavy. The history of taxation upon farm lands is a book in itself; two facts only may be presented: (1) Compared with city taxation, all farm taxation is light. (2) Farmers look upon taxes as the last item of costs to be paid, an affair of the annual surplus if any.

Again, the control of the wage schedule is a matter of "the custom of the vicinage"—a phrase hundreds of years old, true of the Anglo-Saxon laws under which, in a general way, we live to this day in America. What teachers have been getting for years and years, they always tend to get. They themselves are in general content with such wages.

Whenever attempts are made in the larger cities to increase teachers' wages, always a group of protestants arises from the teaching corps itself, saying that the movement will arouse vigorous opposition and produce a reaction against the schools. These objectors are afraid of change; their own minds are under the control of custom. Usually, the protestants win; as refusing to make a change is not news, this victory of custom does not get into the press and before the public. Many a city school superintendent, seeing that the teachers need more money, finds nevertheless that the older and politically powerful teachers of his system will not undertake a campaign for increases.

In the rural districts, the veteran teacher who asks for higher pay is a rarity. Almost all the demands for higher wages come from the young teachers who are more or less free from the domination of custom.

Against this control by custom has come the steady fall in the purchasing power of currency due to the causes already cited, yet open to more explanation at this point. The cyanide process of gold reduction made it profitable

to mine and reduce gold ores, with even so small a content as but \$3 a ton, in the years from 1900 until 1907. By 1914, owing to increases in miners' wages and in other expenses, even the cyanide process was used only when there was at least \$9 of gold per ton of ore. This was the gold inflation period, and during it the amount of gold in the currency was trebled.

There came then the war epoch when even the United States went in fact upon the paper basis, until in 1920 we had in circulation more than \$5,000,000,000 of various kinds of currencies, all nominally exchangeable for gold; all in fact, save the greenbacks, exchangeable for gold at the Treasury in Washington but nowhere else. Also, we had collected from the remainder of the world vast shares of foreign gold so that we had something like \$5,000,000,000 of gold in hoards. Nearly all of this gold we still have.

Now we have greatly reduced our paper currency; we have restored gold to ordinary circulation, and we have deflated the currency. And still we have more than three times as much currency in circulation as we had forty years ago. The gold value of all this currency, the paper included, is obvious and indisputable. But its purchasing power has fallen more than correspondingly. It is true enough that "a dollar is always a dollar" and that "a dollar is always worth 100 cents". But the point for the wage earner is: What does the dollar buy?

Boards of education and school statisticians are amply warranted and justified in making thorough investigations upon precisely this point. The dollar does not buy as much in one city as in another. It does not buy as much now as it bought in the past. Consequently, the teacher in one city on \$2,500 a year may be comparatively well off, but another teacher on the same wage may be poor in another city.

Great cities as well as rural districts dislike to read comparisons. The people of Los Angeles do not like to be told that their costs of living are lower than those in any other great city, though this fact but adds to the credit of Los Angeles as one of the great cities paying the highest salaries to teachers. A list of the states paying in their rural districts the lowest wages to teachers is very unpleasant reading to the thoughtful citizens of some states. Unhappily, the lowest wages to teachers are not paid in the rural districts of states where living is the least costly in money.

This raises the question as to the value of



compulsory state teachers' minimum wage laws. The results of such laws are now well known:

(1) They raise the wages actually paid in many districts. (2) They cause some districts to employ no teachers at all. (3) They create in many minds the notion that the minimum wage is a reasonable standard wage and tend to keep down the maximums paid in the more fortunate and more generous districts. In general, however, they have done many times as much good as harm to the schools. When associated with fair standards for teachers' certificates and when large enough to provide decent maintenance, they are an appropriate means of preventing parsimony from ruining the public schools. In no state should the minimum first year pay of a beginner be less than \$75 a month or \$600 a year. Because of differences in costs of living, the minimum should be at least \$150 in some states. These minimum wage schedules should provide for at least five years of service, and the rate for the fifth year should be at least 75 per cent more than for the first. It costs twice as much to live equally well in some states as in others, even in rural districts.

✓ A fourth element in the control of the wages of teachers is professional opinion, which proceeds partly upon convention and partly upon scientific lines. Convention and custom do not, by any manner of means, agree at all times under all circumstances. Convention makes room for change and progress. Convention is doing what persons and communities and nations elsewhere do. According to the custom of the vicinage, it makes no difference to the city on the East coast what the cities of the Midwest and the cities of the West coast pay to their teachers, and certainly no difference what Great Britain or France or even Canada pays. But according to convention, it is significant. When a city on the West coast raises the wages of kindergartners, the board of education of the city in the Midwest that cares to keep up with the times takes notice.

Of course, within this force of convention is the willingness on the part of cities so influenced to secure teachers from outside the neighborhood. Nothing so tends to keep wages down to the lines of custom as inbreeding. It is a commonplace of the educational world that when a city elects a school superintendent who attended its schools and always taught in them, with not even graduate work elsewhere, there is no probability of increases in wage scales during his administration unless some national crisis comes. And it is a like commonplace that the employment of an outside superintendent, when immediately followed by the employment of several outside supervisors means that there will soon be a movement for increase of teachers' wages.

This is said not on the grounds of educational experience or of educational needs but directly on economic grounds. The invader from outside, the stranger within the gates, the foreigner who is ignorant of and indifferent to local customs, habits and traditions is usually ready to drive through the old wage schedules in the interest of his own ideals. Fortunately for American public schools, there have been and yet are many cities, and some states, with boards of control eager to forward the movement for increases of teachers' wages.

Reviewing the past for light upon the present, an economist may well doubt whether there has been any substantial gain in the compensation

of teachers during the past fifty years—compensation measured not by the fluctuating dollar but in material goods.

By way of illustration, take this case: In 1880, the principal of an elementary school in an Ohio city received for salary \$1,200 a year. The building had twelve rooms and an average attendance of 500 pupils. The same building stands today and has the same number of teachers and about the same number of pupils. The salary of the principal has been increased to \$2,700 in the terms of the dollar. But note other changes. Then in this city these were some of the prevailing prices, viz.:

Dressed chickens 25c. Eggs 8c a doz. Milk 4c a qt.

Men's ready made suits \$12 to \$15. Men's shoes \$2.50 per pr. Bituminous coal \$3 per T. Ice 20c per cwt. Calico 3 to 5c per yd.

As for basic prices, at that time wheat sold for 50c a bushel, corn for 25c and oats for 33c. An 8-room house could be built for \$2,000, and would rent for from \$10 to \$15 a month according to neighborhood.

With respect to professional services, physicians were then charging \$1 for home calls, and dentists estimated their services in their bills at \$1 an hour. Carpenters received \$2 a day, masons \$3. Men clerks in stores received from \$9 to \$12 a week.

Anyone who looks into the foregoing list of prices observes that at the present time, merchandise and services of the same grade cost from three to five times as much. Yet the elementary school principal draws not much more than twice as much.

What then has been happening in America as the economist sees it in respect to teachers and their wages?

First, a tremendous social disequilibrium, unrealized by most of those subjected to it and unknown to the younger people. Whole professions have sunk in relative importance. New occupations have arisen. Some old occupations have almost ceased. Marvelous new interests have appeared.

Perhaps in wonder the foremost of all inventions, radio, has swept the land. We are in the electric age.

In all this social disequilibrium, nothing is more important than the rise of the high school. And it is the high school teacher who most concerns the problem of teachers' wages; not that high school teaching is a much more important social function than elementary school teaching, but that as yet the high school is not old enough to be surrounded by protective social customs. Many city high schools actually give better instruction in their last two years than most small colleges give in their first two years, and some city high schools and consolidated rural high schools give better instruction than some colleges give at any time in their curriculums.

This statement is made, first, because it is true and correct and, second, because there is a tendency on the part even of educators to feel that since the small college pays but low salaries, it is hardly defensible and requires apology to ask higher salaries for the teachers of high schools. It might be well to recall that the college courses at Yale and Harvard one hundred years ago were easier than the last three years of most city high schools of the present time. The famous men who were the graduates of famous colleges a hundred years ago had no more real education than have the graduates of many a city high school of today.

And speaking in the terms of historical economics, one should remind oneself and others that the actual compensation in real merchandise and services is certainly not higher now in our high schools than it was in the colleges of a hundred years ago. The great teachers then received from \$200 to \$600 a year—a time when the ruling pay for day labor was 25 cents and a fine mansion with fifteen to



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twenty rooms could be and often was built for less than \$2,000 and in some parts of the land for less even than \$1,000. One cannot regard the pay of a college president a century ago as poor, though but \$2,000 a year when farm lands immediately about the college were selling for \$10 an acre, their buildings included. Even so late as 1850 in Ohio where teachers were receiving from \$3 to \$12 a week, the best lands were still on the market at \$1.25 an acre, and many lands were still available at 50 cents an acre.

In the social disequilibrium that has taken place, among the changes have been the relative rise of the public school teacher in public esteem, the rise of the architect, and the rise of the engineer, with the consequent decline of some other professional groups. In the professional world, it is doubtful whether any other group actually outranks or even equals the university presidents; just as in the world of business, the bank presidents stand at the top. In a sense, the world of culture has been earthquaked, and from within the social mass there has uprisen the high school in mighty mass, forcing still higher the complete university and to an extent and unfortunately forcing aside the old four-year college. So in the world of business, the bank has been earthquaked into a very peak of power though itself the opposite of things volcanic.

Likewise in this social disequilibrium, seats on boards of education, of but slight importance fifty years ago, have become in all cities at least as respectable as, and in many cities even more honorable and desirable than, seats in the city councils. Few men today look upon a board membership as a means of rising to the city council; if anything, the order is the reverse. So it has happened that the citation that "half of all the taxes remaining over and above interest on bonds goes to the public schools" is no longer considered any argument for economy in school maintenance. The people in general do not desire what is known popularly as "economy" in school affairs. What the people desire is economy in its real sense,—that is good management with resultant good schools.

#### Signs of Adequate Compensation of Teachers

1. Almost no men or women in the service forced to spend any considerable part of their time outside of school earning money for family support.

2. A considerable fraction of married men with families in the service.

3. A considerable fraction of men and women in the service who have ample means to spend their vacations in advanced study or in travel for recreation, and do so.

4. A relatively small labor turnover from other causes than marriage of women teachers.

5. A considerable fraction of new teachers each year coming from other places with thorough training and with years of experience.

6. A considerable fraction of teachers who live in homes owned by themselves or by their own immediate kindred.

7. A reasonable number of pupils per actual classroom.

8. A low rate of absence from illness of teachers.

9. Miscellaneous items, such as frequency of new wearing apparel, book purchases in evidence, attending and sharing in the expenses of churches, societies, etc., presence in public gatherings, movements, etc., home furniture.

When there is real economy in the conduct of the public schools of a city or county, few of the teachers will be forced to spend their evenings and holidays in work for money.

In some cities, some teachers do the following things to increase their incomes, viz.: (1) Solicit insurance. (2) Work as store clerks on Saturdays. (3) Sell merchandise on the road during vacations. (4) Solicit subscriptions for general magazines. (5) Teach evenings in private schools. (6) Address envelopes for mailing lists. (7) Make dresses and hats on wages or contract. (8) Work in garages afternoons, evenings, Saturdays and Sundays. (9) Conduct as brokers real estate or other transactions.

It is common enough for women teachers during their summer vacations to serve as waitresses in summer resorts, and for men teachers to work on farms, and common enough for both men and women to manage or work in summer camps for youth. With regard to such enterprises as these—all of them more or less beneficial to the health—they are less objectionable than other ways of earning money. But the main proposition is that the work of a teacher as such should be so rewarded as to allow all the spare time—evenings, holidays, and vacations, for study, for travel, and for recreation. Any other view of teaching degrades it as something lower than a public service.

What the fraction of married men in the service should be is debatable, but a city with a 1,000 teachers among whom not more than 25 have homes and families is far under the reasonable requirement. Every city should have married men in its service not merely as principals but also as classroom teachers.

At the present time, to spend a summer in advanced studies or in travel requires something like \$400 to \$600 as the minimum under all ordinary conditions. Every teacher should be able to engage in such enterprises at least every other year; that is, one-half of all the teachers of a city or county should be doing something of the kind for mental health and growth every summer. Where this is impossible to most of the teachers, something is out in the wage schedules.

A city with a labor turnover from other causes than marriage of women teachers exceeding a few per cent and not supplying its schools by replacements by veterans in at least one-third of such losses should reform its wage schedules and rules of employment.

The home-owners among teachers in the very large cities are but few. Life is not so organized. Most teachers live in great apartment buildings or in small hotels for permanent guests. But in the smaller cities and in the open country, at least one-half of the school forces should literally "be at home" in their own homes, with the deeds in their own safety.



## ON READING THE BOARD'S PROCEEDINGS

When I think of education, I think of marching feet;  
I think of bands a-playing and parading up the street;  
I glimpse the Great To-morrow, the goal of each To-day—  
And I'd like to join the loudest band and help it whang away.  
(If Vachel Lindsay wants to beat the big bass drum awhile,  
Let him boom a bold accompaniment in his most bombastic style.)

I think of shining faces and of minds with learning stored  
As I read the printer's galleys of "Proceedings of the Board."  
O the cup of education that quenches mental thirst!  
*"Four per cent school building bonds maturing July first . . ."*  
Education, as the pilot, brings the nation into port.  
*"Complete refund of excess fees to judge of Probate Court . . ."*  
As long as education in democracy shall rule—  
*"Mechanical equipment for Elias Michael School . . ."*  
The nation shall be prosperous, the government be just.  
*"Amount left on deposit in the Liberty Central Trust . . ."*  
For knowledge is the magic which true education works—  
*"The payroll for the services of officers and clerks . . ."*

When I think of education, I think of marching feet;  
I think of bands a-playing and parading up the street;  
And when I get a half a chance I whang the big bass drum,  
For I know the Great To-morrow of the world is sure to come  
So long as printers' galley sheets provide such lyric reading  
And public boards of education just keep on "proceeding."

The lines in italics are to be read in an exalted monotone to the imaginary accompaniment of Vachel's rhythmic booming.

deposit boxes. Home-owners make the best teachers. Those who must board, those who must pay rent cannot be of as quiet minds as those who have their own problem of home solved and settled. The higher school authorities should encourage teachers to buy homes.

A city should not have on the average more than 40 children per teacher in the elementary schools, or more than 45 as the maximum in any class. It should not have more than 25 pupils on the average in the high school classes, or more than 40 pupils in any class. In making this calculation, all specialists, all supervisors, all executives and all assistants should be omitted. More than such numbers is overwork, and all overwork is underpaid.

There are cities that require high school teachers to teach six periods a day an average of 40 pupils per class. In such cities, something is radically wrong with the financial management.

Statistics show that in most cities, the highest rate of absence by teachers is in early spring—whatever the month in the locality. In some cities, it runs on the average as high as seventeen per 100 teachers daily at this time of the year. But statistics also show that there are fewer absences where the wages of teachers are high than where they are low. Also, they show that in the cities where the salaries of teachers are not docked for necessary absences, the absences from illness are less than in those cities where all absences cause deductions of pay. The explanation, of course, is that the teacher who is really becoming seriously ill goes to school just one day too long and then is ill for a long time, and also that teachers, in cities where the management is generous, are far more disposed to be regularly at school and not to allow trivial causes to keep them away.

There is something deeper than all this. Where teachers are well paid in general, they are better housed, better fed, and better cared for in all other respects than where the wages are low; consequently, their health records are better.

The last signs in this review concern matters of various characters, some obvious, some obscure. No board member, no educator of experience need be confused when visiting a

school as to whether the teaching staff displays lethargy, indifference, agitation, industry, activity, enthusiasm, confidence, or anything else. A single underpaid individual may be able to camouflage his real feelings, but the disposition of an entire staff, and more conspicuously the disposition of all the teachers as a body in a city or in a county, cannot be concealed picturesquely.

In teachers' wage schedules, there are usually some features essentially regrettable and yet inherent in the wage system, inherent indeed in the nature of human life, inevitable though regrettable. It is a cruel and a bitter thing that the youngsters at the beginning of service are so poorly paid. The hardships of the first and second year of teaching, experienced by the novice who cannot get financial help from parents or friends, are often the cause of leaving the occupation never to return. Yet it costs just as much for a 21 year old man or woman to live nicely as it does for the 50 year old man or woman without dependents.

And the contrary of the schedule is just as harsh and regrettable. The veteran man or woman who has borne the burdens of the school years comes into old age with a wage that shows no relation at all with the successful ledger exhibits of other old persons who have given their lives to no more serious or valuable work than teaching. There are no financial prizes in teaching; even the successful university president or city school superintendent does not come into old age with a large fund or assets accumulated directly from teaching. The good high school teacher whose salary at 50 years of age is \$4,000 or more is fortunate in appearance only, for such a salary is paid only in the large cities where expenses run *pari passu* with income. But few wage scales for teachers provide for paying the most experienced and successful teachers when 50 years old more than two and one-half times as much as the beginner gets with no experience at all.

Great as is this disability of the teachers' wage schedule to deal fairly alike with beginners and with veterans, it is no greater than the inability of the schedule to provide fairly for the married man with a family and at the same time do no injustice to perhaps the equally

competent bachelor teaching in the next classroom, and to the unmarried woman likewise rendering the same service. "Equal pay for equal work" is a slogan that has brought about significant results in the profession of teaching. It has introduced 200,000 women into rural teaching, which once was almost the monopoly of men. It has almost entirely eliminated men from teaching in the elementary schools of the smaller cities. It has maintained at a very small fraction the proportion of men to women teachers in high schools and normal schools. And it has kept down the total of the wage payrolls, though in the country as a whole it has slightly increased the average wage of women teachers. A few years ago, there was a Midwest city with more than one hundred teachers of whom not one was a man; and there are now many cities with less than ten men per one hundred teachers.

Though it is a social service than which no other is more important, teaching is non-economic in its direct nature. Public school teaching is paid for out of taxes that already consume on the average about one-eighth (or 12½ per cent) of the total national income. The schools cost for buildings, maintenance, and teaching about one-third of all the local taxes, and the teaching costs from two-thirds to three-fourths of the total school cost. In a general way, it may be said that our schools cost us about \$1,000,000,000 a year or two-thirds of one per cent of the total national revenue. And the teaching brings no immediate economic return to the public. Most of it is "bread cast upon the waters" that does not return, if at all, until after ten or twenty or even more years. Beyond peradventure of doubt, *most of the teaching returns ultimately many fold*; but this does not immediately relieve the taxpayers of today. If the school is not at present the main agency of culture, the main agency by which mankind is kept out of barbarism, the main agency by which civilization is passed on from generation to generation, what is the agency that does maintain civilization?

Good as the church is, it certainly is not the direct instrument by which culture is kept alive in the United States.

In such case, what is the uppermost limit that the schools should cost in order to do for the youth all that they are capable of understanding? Until this uppermost limit has been worked out by scientific investigation, it is mere assertion to say that "the schools cost too much" and that "teachers' wages have already reached their maximums."

It is true, however, that the schools cannot cost more than a part of the surplus that the total of the nation produces after supplying all the necessities of living and all the materials for later production. Other parts of the surplus of produced wealth must go to charities, to philanthropies, to the fine arts, to scientific research, to religion, and unfortunately even to preparation for defense in war in a world of men that has not yet outlawed war, as it has cannibalism, piracy, and contemporary polygamy.

These salaries that we pay to teachers are paid to them not for their own sakes, but for the sake of the youth taught and of the nation that is coming to be from these ever-advancing youth. The teacher is but the means whereby the youth are made ready for life. And when we think of him and of her, it may be well to keep firmly in mind two admonitions of scripture: "Thou shalt not muzzle the ox that treadeth out thy corn," and "The laborer is worthy of his hire". These are homely words perhaps, but they help to make clear the proposition that *the teachers of the land have the right to ask for themselves and for their natural dependents a fair and equal share per capita in the annual produced wealth of all the people.*

## What About the Married Teacher?

By a Former School Board Official

Is the married school teacher a benefit and a blessing to our public school system or is she a hindrance and a menace?

There are hosts of school boards that are today trying to answer that question and to do what is best for the school in the solving of that perplexing question of the married teacher.

There can be no question as to the efficiency of a great number of our married school teachers, but taken as a whole, are they a benefit to our public schools, are they as much of an influence for progress among the children as are the unmarried teachers?

My experience over a good many years as a public school official has forced me to take the stand that the married teacher as a general rule is not a benefit to our public school system, and that wherever possible she should be replaced by an unmarried teacher. There are a large number of school boards who have gone on record against the married teacher and who make it plain in the hiring of their teachers that no married applicants need apply. The stand that these school boards have taken is the result of experience. They have learned that the best results are secured in their school by the unmarried teachers.

In the first place, a married teacher is more likely to jump a contract than an unmarried one. I have seen teachers resign from our school because their husbands' work had been changed which necessitated that they move elsewhere. Away they went and we were put to all kinds of trouble to secure new teachers in the midst of a term. A contract means nothing to a married teacher as she figures that probably she won't teach again in that vicinity, anyway, and so her jumping her contract won't have any effect on her future. An unmarried teacher with her future in her profession before her is more careful of her contract obligations than is the married teacher.

Then, too, the unmarried teacher puts more into her work than does the married teacher. With the married teacher, there is the division of allegiance and of effort between the school and the home with the school holding second place in her consideration, in the great majority of cases.

### Why the Married Woman Teaches

Thousands of married teachers are teaching merely for the extra money it brings into the family treasury with which to buy luxuries, fine clothes, automobiles, take expensive vacations, entertain elaborately, or some such personal or social consideration. In the case of these teachers the school is merely the means to a selfish end. These teachers are thinking primarily of themselves and not of the school and the welfare of the children entrusted to their care. True, many of them may be very good teachers, but the fact remains that they are simply using the school as a money-making side line, to gratify their personal desires and vanities.

The unmarried teacher, on the other hand, with her interest undivided by household cares, and her future in the teaching profession before her, with her reputation as a teacher to make or to sustain, gives more of an undivided attention and loyalty to her school work with the result that the children and the school receive more from her than they do from the married teacher. The wife of a man who is drawing over \$5,000 a year is not teaching for the good of the school, she is teaching in order that they may have more personal luxury.

Another married teacher, the wife of a man drawing upward of \$3,500, is not teaching for the good she can do the school, but to earn additional money so that they may put on more

style and further their social aspirations.

Another married teacher teaching to help pay for a new house is not working with the good of the school in view, but for personal reasons only.

No matter how good some of these married teachers may be, they are not the benefit to the school, nor the inspiration to the children, that an unmarried teacher is. The married teacher may go through the motions of teaching apparently with as good success as the unmarried teacher, but beneath the surface is the hurry to get the day over and get home, the longing for pay day that personal desires may be satisfied with extra money from the school pay check. The married teacher is thinking more of pay day and quitting time than of results and the future of her pupils.

### When Interest Lags

To show the difference in the mental attitude of the married and unmarried teachers, take for example the preparation of a school entertainment of some kind. I have repeatedly noticed that at such a time the married teachers seem to begrudge every extra hour that they put in. They are anxious to hurry things along and get the thing over with as soon as possible and with as little extra work and time as they can, while the unmarried teachers take a great pride in the proper preparation of the children for such an event. They give unlimited time and energy to make such an occasion a big success, and they share with the children themselves the pride, joy, and excitement of a thing well done, while the married teacher heaves a sigh of relief and is "glad that thing is over."

There is another element which enters into the question of the married teacher and that is the viewpoint of home life which a child gets from the married teacher. The influence of a teacher on a young child is often greater even than the influence of the parents or the home itself. A child naturally gets an idea from seeing married teachers in the school that such a proceeding is the proper thing, that women can keep right on working after marriage as well as before, and the more the rising generation gets that idea in its head, the more married women will be working in the years to come. If we start in the public school to develop such an idea, and such an ideal, what is to become of the homelife of this country?

I have not the slightest objection to the unmarried women in industry or the married woman who has been left by circumstances in a position where she must earn her own living and a living for her family if she has one. Women in such circumstances throw all of their best efforts into making good because to be successful means life itself to them. But what I do object to is the married woman, and her name is legion, who does not have to teach school or work for a living but who simply does it for the personal gain that there is in it for the added luxuries and frills of life. Such women are not only depriving some unmarried woman of an opportunity to earn a living but

### THE PUBLIC'S BUSINESS

The public's business, when properly administered is not unlike private business. Costs are governed by the same laws. In the long run, people get no better service than they pay for, the promise of the demagogue in public life to the contrary notwithstanding. That is not economy which cheapens the quality or lessens the quantity of necessary service, or which conceals expenditures by transferring the cost from the right to the left pocket of the taxpayer. Balancing the budget—always desirable—does not necessarily mean expending less money.—Marcus Aaron, President, Board of Education, Pittsburgh, Pa.

they are also lowering the standard of American home life and inculcating in the minds of the younger generation false ideas and false ideals of what real home life should be. I believe it would be a step in advancement if every school board were to pass a resolution that only unmarried or strictly deserving married teachers should be employed. I believe such a step would be for the best interests of our public schools of today and for the best interests of the America of the future.

### Youth an Advantage in Teaching

The argument has been advanced that the married teacher is a great asset to the school because of the fact that she has a more mature view of things and if she has children of her own, knows better how to handle the children than do the younger, unmarried teachers. My observation has been that youth calls to youth and responds to youth better than to age.

The teachers who make the greatest hit with the children and who obtain by far the best results with the children, are the young teachers, teachers who are full of life, full of pep, who aren't so old that they have forgotten their own youth, and who have the enthusiasm to put into their work that keeps their pupils interested in their studies and loyal to their teacher.

Of course there are many older teachers who keep their hold on their pupils through advancing years, who, no matter what their age, always seem able to get the youthful viewpoint of their pupils, and who accomplish great results. Such teachers are the exception and not the rule. Such teachers are born, not made. They are teachers who are particularly adapted by nature for their work. They have the knack of knowing and understanding human nature and particularly children, and to such teachers success is sure and continual. But as a general rule it is the younger teachers who most quickly gain the confidence of the children and who obtain the best results. Look back over your own school days. Visualize again the teachers you had, the young ones and the older ones. Which did you do the best work for?

It is an impossibility for a married teacher to give as good work to her duties if she has the responsibilities of a household to look after as for the teacher who is unmarried and whose school work is her first consideration. The married teacher who maintains a household thinks first of home and secondly of school. Her mind turns first to the things closest to her, closest to her personal welfare, and in the case of the married teacher, that is the home. With the unmarried teacher with a reputation to make or sustain, the thing which is closest to her is that by which she earns her living and upon which she bases her future hopes of advancement and success. In her case, that is the school. The school, the children, her work, is first in her thoughts, first in her plans, and upon her work depends her future. Naturally, then, her work receives the major part of her attention and she gives to that work an attention which is not divided by household cares. She is working as a main issue not as a side line. Which of the two is the greater success in the long run? Which is the more generally successful? There can be but one answer, to my mind, and from what I have seen personally and heard from school leaders, the answer is heavily on the side of the unmarried teacher.

### Duty to the Home

If the married teacher does not maintain a home, if she passes over the responsibilities of her household to others, if she simply uses her home as a place to sleep, then she is not living up to the precepts of true home life and her influence upon the children cannot build the regard and reverence for home life which we like to look upon as the backbone of our American civilization.

(Continued on Page 141)



# Provisions for Voluntary and Compulsory Attendance upon Public Secondary Schools

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In a previous paper some of the principal legal regulations relative to admission and membership in public secondary schools were considered. In this paper the laws relating to the educational rights of children, as shown by the voluntary and compulsory attendance statutes as interpreted by the courts, will be presented. It is significant that, not only are many of the states offering broad curricular advantages free to all the people, but also the legislatures are providing by statutes guarantees that the children, at least, and sometimes the illiterate adults, shall share in the educational opportunities provided.

These statutory guarantees as related to voluntary and compulsory attendance assume three forms: Laws providing for the discovery of individuals who are of compulsory school age, laws providing for the enforcement of the statutes requiring public school attendance, and laws permitting exemption from public school attendance under certain conditions.

As a means for discovering the identity and place of residence of individuals who should be in public schools, the statutes of almost all states provide for a school census. Forty-seven states require by law that a census of individuals of school age be taken.<sup>1</sup> This is indicated in the accompanying key number 1315 and in the summary chart.

The early attitude of the courts was that the statutes requiring a census of children of school age to be made by the trustees of the school district granted exclusive powers to the trustees. Their reports were not subject to rejection by school officials of the county even though believed to be incorrect.<sup>1</sup> State aid, once apportioned to a school district on the basis of a fraudulent census return, could not be recalled and rightfully reapportioned according to the statutes at that time.<sup>2</sup> These holdings, which seem questionable from the standpoint of justice, have not been followed in a recent case in Utah.<sup>3</sup> In this case the Supreme Court of Utah held that the Salt Lake City Board of Education, having received \$49,912.06 more than it was justly entitled to as a result of an erroneous census, must have that amount withheld from the next apportionment by the state superintendent of schools.

The statutory requirement delimits the duty of the trustees in furnishing census data. Thus, where the law requires a census to be taken every five years, a census may not be required more frequently by the state superintendent of public instruction.<sup>4</sup> A public school enumeration should include "children residing in the district at the time" rather than "permanent home" or "domicile".<sup>5</sup>

All states prescribe the ages of compulsory public school attendance. The ages included within the compulsory full-time day attendance laws vary from the minimum requirement of from eight to twelve years of age in Virginia to the maximum requirement of from six years to eighteen years of age in Idaho and Ohio.<sup>6</sup> Twenty-four states prescribe the ages of compulsory part-time continuation school attend-

ance. Ten states require part-time attendance up to sixteen years of age. Michigan sets seventeen years as the upper limit. Twelve states compel part-time attendance until eighteen years of age.<sup>7</sup> Rhode Island requires illiterates to attend part-time school until twenty-one years of age unless they attend evening school. California, in addition to requiring part-time attendance up to eighteen years, has a statutory requirement that those who cannot read and write the English language to a degree of proficiency equal to that of the sixth grade of the elementary schools must attend special part-time classes at least four hours per week unless they attend evening classes for a similar time.

Attendance upon evening classes is compulsory for adolescents and adults in ten states.<sup>8</sup> Three states require those who have not attained a fifth grade standard of literacy to attend evening classes until twenty-one years old. Massachusetts requires illiterate males to attend evening classes until twenty-one years of age. California and Rhode Island require illiterates to attend either evening or day part-time classes. Colorado and Connecticut require illiterate working youths between fourteen and sixteen years of age who are not attending day schools to attend evening schools. Nebraska statutes require youths of fourteen to sixteen years of age who are not eighth grade graduates to attend evening classes unless attending day schools. Utah, according to the statutes of that state, requires illiterates to attend evening classes until thirty-five years of age.

The authority of the state to require attendance upon public secondary schools, unless exempted for one of the statutory causes, is enforced by courts. Every state makes the parents or guardians responsible for the school attendance of the children, and provides fines upon parents or guardians if the children are not required to comply with the attendance laws.<sup>9</sup> Ignorance of the details of the compulsory attendance law does not excuse a parent or guardian from the fine for its violation.<sup>10</sup> Neither may a citizen who violates the compulsory attendance law pick his own magistrate; but he must be tried before "any justice of the peace or juvenile judge".<sup>11</sup> However, where a child was excluded from school for failure to comply with a rule of the public school as to vaccination and the evidence showed that the parent was willing and anxious to have the child attend, the conviction was held to be unlawful.<sup>12</sup>

The statutory prescriptions of ages included within the compulsory attendance provisions have been interpreted in their usual meaning and so as to guarantee to children the maximum of educational opportunity. Thus, where the statutes of Tennessee specified the ages as between the "ages of seven and sixteen years, inclusive," the state Supreme Court held that a child sixteen years and six months old must be sent to school. Justice Bachman, in rendering the opinion of the court, said:

"The words are to be taken in their usual and ordinary acceptation, and, so considered, must apply to children in their seventh, sixteenth, and intermediate years, as these respective ages are customarily referred to—hence the use of the word in the statute clearly denotes

the intent to comprehend the full period of a child's sixteenth year."<sup>13</sup>

If a child reaches the maximum age limit of compulsory attendance laws during the fiscal year but before school sessions begin, he is exempt from the compulsory features of such laws.<sup>14</sup> However, parents must secure the permission of the superintendent of schools, if they would hope to maintain an exemption claim on the basis of the substitution of the private instruction by parents for the standard instruction provided by the public schools.<sup>15</sup>

The courts seem to have supported consistently the right of states to require attendance upon public schools unless the youth is attending a private school or is exempted in accordance with other exemption clauses of the statutes. No case has been found which denies this right. In a recent Wisconsin Supreme Court case, Justice Rosenberry defined the relations of the state with those of parents in this regard in very decisive terms:

"It may well be that there are parents in the state of Wisconsin who do not fully understand the purpose and objects of our recent legislation in regard to the education, protection, and reformation of children, and that such legislation imposes upon parents a positive duty and a much higher obligation than that under which many parents suppose themselves to labor. The parent no longer has the right to decide whether his child shall attend school or work; the law determines that for him."<sup>16</sup> Thus, when the statutes of New York State provided that a child of compulsory school age must be in attendance upon instruction in a public school or elsewhere unless physically or mentally unfit, the New York County Court held that improper physical and mental condition was the only defense against prosecution for violation of the compulsory attendance laws.<sup>17</sup>

The intent of the compulsory school attendance legislation is an attempt only to insure the educational rights of children against interference from selfish and short-sighted parents and employers, rather than a discrimination against private and parochial schools. This is evidenced by the fact that 43 states provide by statute that attendance upon private or parochial schools exempts from the requirements of attendance upon public schools.<sup>18</sup> The Kansas State Supreme Court held in 1916 that a parent who sent his child to a private, denominational, or parochial school in lieu of public school attendance was not subject to the penalties of the truancy law.<sup>19</sup>

The Federal District Court of Oregon has held in a decision of March 31, 1924, that an act adopted by initiative petition on November 7, 1922, in Oregon, which proposed to ignore private school attendance as a legitimate cause of exemption from public school attendance, was unconstitutional.<sup>20</sup> The court held that such an act, if put into effect on September 1, 1926, as contemplated, would deprive the private and parochial schools of property rights, without due process of law, and therefore vio-

<sup>1</sup>Young, County Supt. v. State ex rel. Morgan et al. (1894), 138 Ind. 206, 37 N. E. 984, 985.

<sup>2</sup>The Inhabitants of the Township of Morris, in the County of Morris, v. A. Carey, Silas H. Arnold and Lewis H. Johnson (1859), 27 N. J. 377, 389.

<sup>3</sup>Bd. of Ed. of Alpine School Dist., Utah County et al. v. Bd. of Ed. of Salt Lake City et al. (1923), 62 Utah 302, 219, pp. 542, 547.

<sup>4</sup>Louisville School Bd. v. Supt. of Public Instruction (1897), 102 Ky. 394, 43 S. W. 718, 719.

<sup>5</sup>State ex rel. Logan et al. v. Shouse et al. School Directors (1924), (Kansas City, Missouri, Ct. of Appeals), 257 S. W. 827, 828.

<sup>6</sup>See key number 1322, Summary Chart, X, post.

<sup>7</sup>See key number 1000, Summary Chart IV, ante.

<sup>8</sup>See key number 1331, Summary Chart X, post.

<sup>9</sup>See key number 1323 and Summary Chart, post.

<sup>10</sup>Commonwealth v. Florence (1921), 192 Ky. 236, 232, S. W. 369, 371.

<sup>11</sup>Ford v. State (1924), 263 S. W. 60 (Tennessee).

<sup>12</sup>State of Ohio v. L. M. Turney (1909), 21 O. C. D. 222, 31 Ohio Circuit Court, 222, 225. Also see Chapter VIII for discussion of health and vaccination.

<sup>13</sup>Covell v. State (1921), 143 Tenn. 571, 227, S. W. 41.

<sup>14</sup>Butler v. State (1917), 81 Tex. Cr. R. 167, 194, S. W. 106, 167.

<sup>15</sup>The State of Washington, Respondent, v. F. B. Comport, Appellant (1912), 69 Wash. 361, 363, 364, 124, p. 910.

<sup>16</sup>In re Alley (1921), 174 Wis. 85, 182 N. W. 360, 362.

<sup>17</sup>People v. Himmanen (1919), 178 N. Y. S. 282, 283, 108 Misc. Rep. 275.

<sup>18</sup>See key number 1327, Summary Chart X, post.

<sup>19</sup>State v. Will (1916), 99 Kan. 167, 169, p. 1025.

<sup>20</sup>Society of the Sisters of the Holy Names of Jesus and Mary v. Pierce, Governor of Oregon, et al. (1924), 296 Fed. Rep. 928, 931, 932, 938. Also Hill Military Academy v. Same. (Same reference.)







# The School Library

Alice Struthers, Vice-Principal of McKinley Junior High School, Los Angeles

All academic, manual, social, and other activities of the junior high school should find inspirational guidance through the librarian and the library. It should equip "the youth with the facile skill to use books, the habit of making friends of them, and the ability to extract their wealth." It should supplement the regular textbook work and give training that will aid in the use of any library facilities. It should become the central laboratory of the school, and should reflect, through its atmosphere of dignity, refinement, and cooperation, the highest ideals of the school. In order for the library to function as it should, plans to that end must be carefully worked out in every detail. The N. E. A. has realized the necessity for serious consideration of the library problem and a committee on library organization and equipment nine years ago presented a report<sup>1</sup> that was adopted by the North Central Association of Colleges and Secondary Schools and the Secondary Department of the N. E. A. and has made possible a national standard for high school, senior and junior library development.

**The Librarian:** The librarian is the controlling factor and the guiding force of the library. In addition to the clerical and technical work connected with the handling of books, the librarian has a great educational work. She should be ready to guide and direct the reference work of the various pupils and to assist teachers in making their reference lists. She should give library instruction to all pupils in the school, and should plan and put into operation definite library courses. She should know more than books. She should delight in the companionship of the developing adolescent. She should radiate the spirit of helpful service and a desire to cooperate and to discover the interests of pupils and to direct their reading.

The making of appropriate book lists for the library is one of the most important duties of the junior high school librarian. The librarian must be familiar with the different courses of study, and the desires of each teacher in regard to library assistance. In order to be able to give this broad service, it is necessary that the librarian shall have had adequate preparation and training. It is advisable that she be a university graduate and hold a high school teacher's certificate as well as a librarian's certificate.

**Physical Conditions:** The importance of the physical condition of the library: its location, its size, shape, lighting, heating, auxiliary rooms, and finish, cannot be over-estimated. It should be so located as to assure ease of access to all and in a quiet part of the building. The floor covering should be linoleum or cork carpet and the main doors should be on swinging hinges. To aid in producing a quiet and dignified atmosphere that is desired for library work, the woodwork and walls should be finished in soft, neutral tones. The whole room and its furnishings and decorations should harmonize to create an inviting hospitable atmosphere.

It should be large enough to accommodate at least ten per cent of the school each period of the day.

The lighting is a most important feature. It is delightful, if possible, to have north light. Most of the windows should be high. Arched windows are always pleasing and a group of low windows add to the beauty of the room. In the placing of the heating apparatus, the book



THE LIBRARY IN THE MCKINLEY JUNIOR HIGH SCHOOL, LOS ANGELES, CALIF.

shelving space should not be encroached upon. Book stacks should be placed against the wall and should not break up the seating spaces. A work room with closets, cupboards, running water, sinks, and work tables are necessary to a well planned library. A room or a special corner for magazines and special pamphlet materials add to the efficiency of the library work. No floor space should be given over to book stacks as the floor space is necessary for seating capacity; stacks also increase the discipline problem.

**Equipment:** The library furniture should radiate a feeling of dignified permanence and substantial existence, be pleasing to the eye, well constructed, and fitted to the purpose. Reliable makers of library furniture should be consulted when one is planning a new library or building an old one. The principal, or the one in charge of the library installation program, should welcome the advice of the librarian. Adjustable shelving should be placed against the wall spaces of the room. Enough shelving should be planned to care for all present books and to allow for a growth to accommodate the maximum growth of the school. The standard recognized as a basis to estimate for shelving is about eight books to a lineal foot.

The plan of the library of the McKinley Junior High School, Los Angeles, below shows serviceable and attractive arrangement of library furniture. The tables are 3'x5' and seat comfortably six people. There is floor space of about sixteen square feet for each individual, to avoid crowding, and to give them freedom and comfort. The chairs are strong, low, and comfortable. The charging desk is placed near the exit, and so every table is within the range of vision of the person in charge at the desk. It is also placed near the entrance of the work room to make it possible for the librarian to supervise work in the work room and be in immediate contact with the main reading room. Many steps are saved each day with such an arrangement. A special table for reference work may be placed in an adjoining room. If economy of space is demanded double-faced book shelves may be placed so as to shut off a corner for special reference work for teach-

ers and pupils. The card catalog cabinet is centrally located, near the entrance, out of the line of exit and handy to the charging desk. The book display rack and magazine rack are more serviceable and attractive when placed in a central location. The atlas and dictionary case may be in front and to one side of the charging desk, balancing the position of the catalog cabinet. The newspaper file, which can never be made very pleasing to the eye, is back in a corner, while the pamphlet file, due to the fact that it may contain valuable documents, is placed immediately back of the charging desk where it may be easily supervised. The display cases with glass doors, stand out as a center of interest. They contain the illustrated editions of books and may be made very attractive by the careful placing of plants or spots of colorful bits of pottery, tapestries or cushions and low, inviting benches. The decorative features should be worked out most carefully. The best art of the school should find expression in the library. Beautiful prints and well-chosen casts lend a note of elegance and refinement. The library bulletin board may be made an interesting, artistic space by the use of posters and the proper placing of displays.

Every library should have ample accommodations for collections of illustrative materials to be used in the various departments of the school. The book truck is a part of the labor-saving equipment necessary in every efficient library.

The availability of the library to teachers and pupils is emphasized in the following statements:

"The Junior High School library is for the benefit of every child enrolled in the school.

"Its work should begin with the lowest grade.

"There must be hearty cooperation between the library and all other departments of the school.

"Programs should be arranged to give every child an opportunity to come to the library.

"Teachers should familiarize themselves with the resources of the library and should suggest material to be secured, bearing directly upon their respective subjects.

<sup>1</sup>Certain C. C.: Cham. of Com. on Lib. Or. & Equipment. Standard Lib. Or.; Equipment for Secondary Schools of Different Sizes. N. E. A. Dept. of Secondary Education, 1916.

"There should be frequent consultations between teachers and librarian, so that plans may be made effective.

"The librarian should be familiar with the course of study offered by the school, in order to meet the needs of all departments.

"The librarian should cultivate a sympathetic attitude toward the pupil in order to find where his interest lies, and, through that, help him form a taste for good reading.

"The resources of the library and its activities should be emphasized frequently throughout the school by means of posters, publicity in the school paper, essay contests, etc."<sup>2</sup>

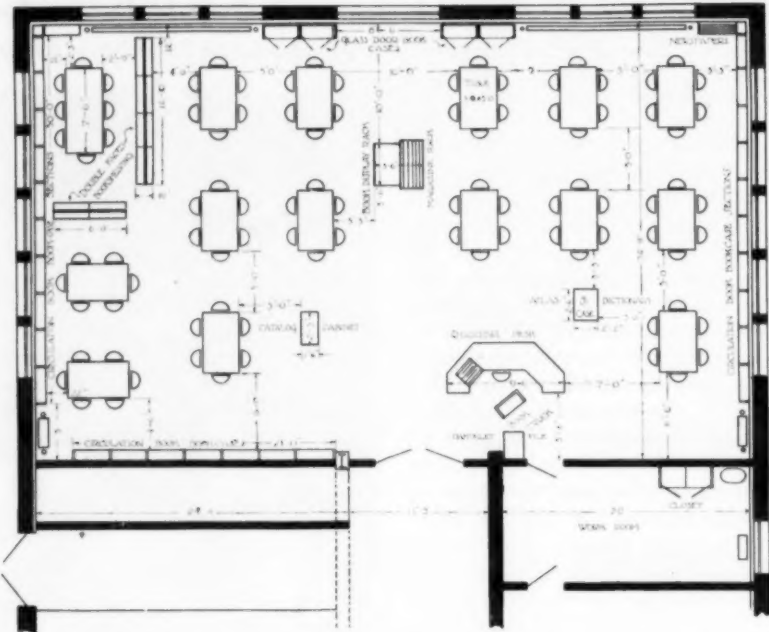
The above assumptions are made for the junior high school library plan by the committee on course of study of Los Angeles.

But with assumptions, objectives, and pupils' experience, all tabulated, the library work cannot proceed until the administration plans for its operation. The realization of library privileges are, to a great extent, subject to the schedule of the school. There must be time allotted to every child for library work. A period every day should be assigned to every child free from recitations. When this is done, the study hall teacher and the librarian may work together to see that each child finds a way to enjoy the library privilege. The distribution of study periods should be so evenly balanced that about one-eighth to one-sixth of the school is at study or in the library each period.

Teachers may assign definite work to be done in the library to stimulate the library habit. English teachers may give one period a week to silent reading and permit the children to have the opportunity to choose their books at stated times under their supervision with the assistance of the librarian. Certain teachers may plan with the librarian definite periods at which time to bring their classes for browsing and reference work. During regular recitation periods, certain groups of pupils may be permitted to report to the library to do work on special topics to report back to the class. All teachers should plan some collateral reading schedule for their classes. In schools where there is the common home room period, certain groups may be scheduled to use the library for club and social work. In schools where the organization does not permit of a library study period, a library schedule may be worked out by the librarian and the teachers of supervised study period, and the office. The library may be open before and after session for pupils to call for and to return books. The library schedule should be so carefully planned and so clearly understood by all that pupils may easily find a place for it in their programs. A plan whereby all entering pupils can at the beginning of each term attend lectures on the library, given by the librarian, can easily be arranged through the English Department, for all pupils take English. A plan by which other new pupils may be introduced to the library can easily be managed by a student aid committee in each home room. A duty of this committee should be to take, at a time specified by the librarian, new pupils to the library for the necessary introduction and instruction. There should be a gradually increasing amount of library work assigned from seventh to ninth grades.

The consultation room or teacher alcove in connection with the library should be an invitation to teachers to familiarize themselves with all the library facilities bearing upon their respective work. The personality of the librarian and the attitude of the teachers of the school determine, to a great extent, the available service rendered by the library to the pupils.

*Funds for Libraries:* The salary of the librarian should come from the regular teachers'



FLOOR PLAN OF THE MCKINLEY JUNIOR HIGH SCHOOL LIBRARY.

fund. New libraries and their furnishings should be cared for by local boards in their annual budget. The books should be supplied and kept up by a state apportionment, the amount depending upon the enrollment of the school. Sets of books that are collateral or supplementary to local curriculum plans, should be furnished by the local boards, and cared for by the textbook clerk. Magazines and periodicals should have a regular apportionment. Decorative features and luxuries should be bought out of student body funds or donated by philanthropists.

*Library Contribution:* The library may be considered the social efficiency center of the school. It provides the source of the mastery of tradition. In its archives should be the best of the racial traditions, the wealth of wisdom and the information that the pupils need to supplement their texts. The junior high school

library operates a natural cooperative scheme. The librarian cooperates with every department. The teacher works with the librarian. The pupil works with both librarian and teacher, to gain for himself to give to the group. It is a group activity which constantly stimulates group conscientiousness through the experience of habitually working together. Library projects and practical work in the library give the pupil a share in the duties and responsibilities of the library. It makes him appreciate the library as his. He has the feeling of American sovereignty, and his ideals are stimulated. The natural responsiveness of the pupils to the atmosphere in the library is one of its greatest inspirational opportunities. To see boisterous children suddenly become silent, dignified, and almost reverent, upon entering their library, is in itself an indication of an uplifting influence that is silently doing its work.

## The Function of School Boards

The survey committee engaged at Butte Montana, has defined the scope and function of boards of education in the following language:

1. Select the chief executive officer and support him in the discharge of his duties.
2. Pass upon the annual budget for maintenance prepared by the chief executive and his assistants (budget including sources and amount of revenue available, as well as expenditures).
3. Debate and pass upon recommendations of chief executive for additional capital outlays—buildings, sites, improvements—and determine the means of financing such outlays; e. g., bonds, loans.
4. Advise with the chief executive, affording a group judgment, on his recommendations for extensions or readjustments of the scope of educational activities.
5. Appoint (upon nomination and recommendation of the chief executive) teachers, principals and supervisors.
6. Determine after consultation and discussion with the chief executive, the schedule of salaries.
7. Require and consider report of the business transacted or pending and of the financial status of the system.
8. Require and discuss report of the chief executive concerning progress of the schools, in terms of achievements of pupils, teachers, supervisors.
9. Adopt, upon consultation with the chief executive, a set of by-laws or rules for the

government of the school system; i. e., designate authority of executive and administrative officers and duties to be performed by the board or its committees.

10. Pass upon architect's plans, by the chief executive and his assistants, for buildings that have been authorized.

11. Represent needs of the schools before city authorities or the legislature.

12. Approve the list of bills for expenditure previously authorized and approved by executive officers.

13. Consider recommendations of executive officers on legal matters, decide steps to be taken; i. e., suits to quiet title, condemnation.

14. Approve textbooks selected by the chief executive and approve courses of study recommended by him.

15. Represent needs of the schools before the public; i. e., press, platform.

16. Serve as laymen, ready (even after retiring from the board) to champion school needs and to further public support of the schools; i. e., as others champion good streets, parks.

17. Act as a court of final appeal for teachers, supervisors and patrons in cases which the superintendent has not been able to dispose of or which may be appealed from his decision.

18. Hear communications, written or oral, from citizens or organizations on matters of administration or policy.

<sup>2</sup>Los Angeles City High School Course of Study Monographs, No. 21, p. 7, June, 1923.



# A Study of Sex Differences in Mental Development as Revealed by Group Intelligence Tests

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Although educational literature during the last four or five years has been devoted very largely to a discussion of various forms and types of scientific testing, and to the application of such results in a practical manner in reclassification and reorganization of the schools and related topics, it is a noteworthy fact that very little has been written in discussion of possible sex differences as revealed by mental growth curves. This is, no doubt, partly due to the fact that test data in schools where comprehensive testing programs have been carried on are very seldom compiled separately for the two sexes at each life age. Usually other and more immediately practical objectives have been held in view, and the matter of possible sex difference has been lost sight of. Too often the dicta of preeminent leaders in this field have been taken on faith without independent research conducted on a generally widespread scale for the purpose of verification.

Terman has found some sex difference usually in favor of the girls up to and including the thirteenth year, but he attributes such difference in the years of the upper elementary grades to a natural selection due to the fact that more girls graduate at the age of thirteen than boys. His final conclusion is that sex differences are negligible and the chart which appears on page 69 in "The Measurement of Intelligence" indicates a very small sex difference. Such writers are Bridges and Yerkes believe that serious injustice is done in a good many cases where the sexes are not taken into account separately in the standardization of tests, because they find substantial differences especially at the following ages: Eight to eleven, twelve and thirteen to fifteen.

It is, of course, entirely apparent to one accustomed to the use of tests that any sex difference is entirely concealed in the manner in which tests are now standardized. Group tests as well as individual tests have without exception been standardized using supposedly unselected sections of a mixed population as a basis for standardization. Unfortunately, there is no measuring unit to measure mental growth. If there were a standard unit to measure mental growth we would be able to say, to assume a hypothetical case, that the development from the eighth to the ninth years for a mixed group might be six imaginary units of growth and the development from fourteen to fifteen years four imaginary units of growth. But, since we have no such unit of measure, we must content ourselves with saying that the amount of mental growth from year to year is probably not constant. We know of no one who claims that there are equal amounts of mental growth between the various life ages.

Such study as has been made of sex differences in mental development as it is measured by intelligence tests and of mental growth as it varies for the various life ages is open in a number of instances to the charge of employing insufficient cases to make the results altogether convincing. Also, for most of these studies there is the persisting suspicion that they are either based on typical cases or that they do not in any case represent an entire population in any given community, thus proving their unselectivity, and that they have not been observed for a sufficient length of years. We have tried to avoid such faults in the collection and formulation of data used in this article.

Two noteworthy contributions along this line

have appeared in the Journal of Educational Psychology within the past three years. The first, an article by Catherine Murdock and Louis R. Sullivan, entitled "Some Evidence of an Adolescent Increase in the Rate of Mental Growth",<sup>1</sup> and the second by Bird T. Baldwin and Lorle I. Stecher, entitled "Educational Data From Consecutive Stanford-Binet Tests".<sup>2</sup> In the first of these studies, 580 boys and girls were tested with the Haggerty and National Group Tests and in the second mentioned study less than one hundred boys and girls were tested with the Stanford-Binet individual test. Mental growth curves were not separately plotted by Murdock and Sullivan, whereas the mental growth curves plotted by Baldwin and Stecher were for the average group (I.Q. 90-110) and the superior group (I.Q. above 110), the curves being based on mental age and not intelligence quotients as in our study. There were no curves plotted for an average taking all the boys and an average including all the girls separately.

In order to get a general sex tendency it would surely be necessary to include an entire group with the inferior, average and superior all included as we have done. Also, in neither case were average curves plotted for the mixed group of both sexes. Sex differences which are concealed in the comparison of the curve for boys and the curve for girls may be clearly brought out when we compare these two curves with the average for both sexes. For example, the boys and girls may be separated by four I.Q. points at the twelfth year in life age and again the same number of points at the thirteenth year. Any acceleration in mental growth which may exist for either sex is obviously concealed where there is this same relative difference until we plot the average curve which may lie nearer to the one sex than the other at one of these two points. To illustrate, let us assume that at twelve the boys are two I.Q. points above and the girls two I.Q. points below the mean, and at thirteen being still four points apart the boys are three I.Q. points above the mean and the girls one I.Q. point below the mean. This situation reveals a very pronounced acceleration for boys and also an acceleration for girls which would have been unobserved without the mean.

The two articles mentioned above agree with each other and with our results in the one general conclusion, namely, that there is a high

degree of correlation in mental and physical development and that there is a decided pre-adolescent and adolescent acceleration in mental growth which corresponds roughly to the same acceleration in physical growth.

We have used the National Intelligence Test Form A and the Illinois Intelligence Test, both forms in the elementary schools, and the Terman Group Test in the high school for the purpose of our study. Our data are based on 1133 cases which represent the entire school population of our city. The testing was conducted over a period covering three years. We included separate data for each sex and each life age from eight to seventeen, inclusive. Figures for standard deviation for the whole group as well as for the standard deviation of each sex for each life age were computed. Since we have included the whole community population at these ages our findings cannot be open to the charge of selectivity. All of our curves in the various charts are based on I.Qs. for the different ages under consideration.

We realize the fact that our results would be more accurate if it had been possible to use some single form of group test on all cases for all ages, but because of including all grades from three to twelve, inclusive, it was necessary to use tests best adapted to the different ages. The tests which we did employ yielded high coefficients of correlation varying from .814 ( $\pm .026$  Pearson) to .853 ( $\pm .019$  Pearson). The tests were administered in every instance by experienced testers, and all mathematical computations were checked and rechecked and are as free from errors as it is possible to make them. We believe that an individual test such as the Stanford revision would be somewhat more accurate, but in those random cases where we did check with the Binet tests a high degree of correlation for the group was found to exist. However, such conclusions as we make will in no instance be interpreted to apply to any form of test other than group tests.

Table I constitutes a summary of our findings for the entire group for the different ages from eight to seventeen, inclusive. We give the number of cases for each age for each sex. In column four we give the mean for the mixed group, then follows in columns five and six the mean for boys and girls, also standard deviation<sup>3</sup> for boys and girls in columns seven and eight. In the last six columns sex differences in I.Q. S.D. and relation to mean are shown. The excess of I.Q. and S.D. is given in each case. In the last two columns the figures indicate relation of each sex curve to the mean. "1" for both boys and girls means the highest point in the I.Q. curve relative to the mean, and then receding until we reach "10" which is the lowest point relative to the mean.

It is highly significant that when we compare relationship to the mean for girls at eight and boys at ten and then continue our comparison at two years apart, which represents roughly the difference in physical development, we do find a decided comparability. For instance, where the girls at eight are at the fifth step relative to the mean the boys are at the third step at ten and where the girls are at the second step at nine the boys are at the fourth step at eleven, and so we may run this comparison through at a separation of two years with an evident comparability persisting. This fact and the further fact that the greatest differences in the mental curves occur at or near the

<sup>3</sup>Charlier's formula, Vol. VIII, No. 3, Jr. Ed. Research.



adolescent period and then again some time before the beginning of fetal life, where there are also high modes in the physical growth curves, leaves no doubt in our mind that in a general way mental growth correlates fairly closely with physical growth throughout the entire period from early life to complete maturity. The amount of this correlation is clearly impossible to determine, but where there are two high modes in an imaginary curve of physical development, the first being several years before adolescence and the second about the time of adolescence, we find pronounced corresponding high modes in the mental growth curves. Where there is an acceleration in physical development we find a corresponding acceleration in mental development. This acceleration comes for the girls in our experiment, as the curves clearly show, at about nine years of age and then again around twelve years of age and later, and for the boys at around ten to eleven and then again at thirteen or later. The correlation is particularly clearly drawn for the girls and somewhat less clearly for the boys.

modes at these two same ages, although we find the highest mode at fourteen, or after a period of complete sexual maturity has been reached. The next highest mode is nine and the third highest point is twelve considering relation to the mean. Regarding the boys' curve in the absolute we find high points at eleven and twelve and thirteen years of age, regarded in relation to the mean we find the highest points at sixteen and seventeen which will correspond to the girls' highest point at fourteen or at approximately a life age comparable to the girls' life age at fourteen or after complete sexual maturity has been reached. Ten and eleven and again thirteen are comparatively high points in the absolute as well as in comparison with the mean for the boys. We see that at no single age for the ages under discussion do we find a comparability in the two sexes in their relationship to the mean. Where the boys are last we find the girls are first, and where the boys are first the girls are last.

As we have previously said, our results agree in a general way with the studies already men-

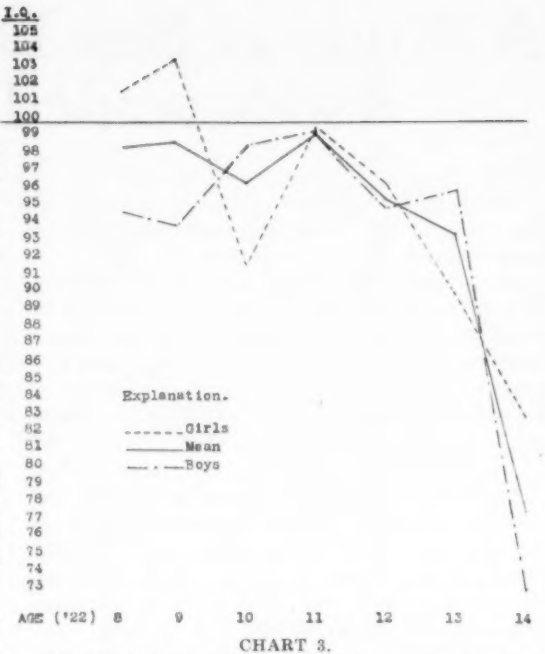


CHART 3.  
Mean intelligence curve with mental growth curves for both boys and girls plotted separately at each life age from 8-14 for 1922 (Illinois test). The cases are identical with chart two.

Age	Number of Cases		I. Q. Mean	I. Q.		Standard Deviation		Sex Differences		S. D.		*Relation to Mean	
	Boys	Girls		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
8	37	51	96.4	93.5	98.6	16.0	14.0	Ex.	Ex.	5.05	2.00	8	5
9	65	53	96.8	94.0	100.2	15.8	15.7	Ex.	Ex.	6.10	...	7	2
10	69	65	94.5	93.4	95.8	18.9	21.1	Ex.	Ex.	2.36	2.15	3	8
11	64	56	96.3	95.1	97.7	17.6	18.6	Ex.	Ex.	2.60	...	4	7
12	77	80	98.0	95.1	101.0	18.5	17.4	Ex.	Ex.	5.92	1.10	9	3
13	92	83	97.4	94.9	100.0	17.7	18.3	Ex.	Ex.	5.15	...	6	4
14	83	63	95.1	92.0	99.2	17.0	15.3	Ex.	Ex.	7.18	3.75	10	1
15	44	56	89.9	87.2	92.0	14.8	11.6	Ex.	Ex.	4.85	3.20	5	6
16	36	27	89.6	89.0	90.5	10.7	13.3	Ex.	Ex.	1.48	2.60	2	9
17	17	13	83.8	86.8	79.8	15.9	9.7	Ex.	Ex.	7.06	6.20	1	10

\*Note.—1 means highest mode in I. Q. curve, not absolutely, but relative to mean, then receding to 10 as lowest point relative to mean.

The four accompanying charts are mental growth charts designed to present graphically differences in mental growth. The three mental growth curves of Chart 1 show in a graphic form the difference which exists at each life age in intelligence for boys and girls as well as the relation of each to the arithmetical mean of the two sexes taken together. It will be seen that there is a constant superiority manifest for the girls for all ages from eight to sixteen, inclusive, but at seventeen the boys surpass the girls. It is our belief that our results for the last age are somewhat selective in that number of seventeen-year-old pupils, particularly girls, have graduated from high school, and, since these are usually the best endowed mentally, our result at seventeen will be somewhat affected. However, such is not the case at any of the other ages. Let us now examine the two sex curves separately. In the absolute the girls' curve shows its highest mode at nine and its next highest mode at twelve. Regarded in relation to the mean we find also two high

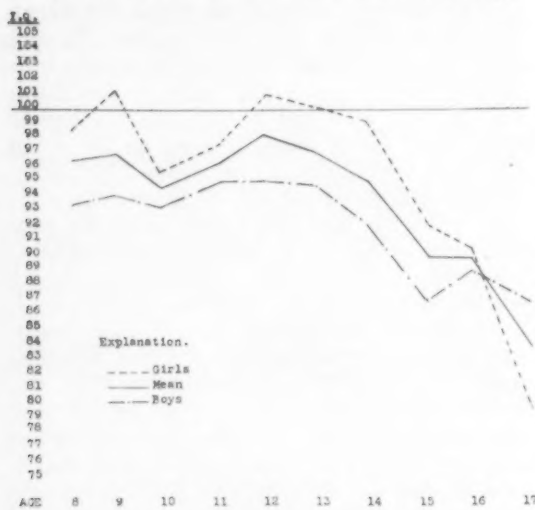


CHART 1.

I.Q. curves for various life ages from 8-17 plotted separately for boys and girls and also for the average of both taken together. I.Q.'s are based on the Illinois intelligence test, Terman's group test and the National intelligence test given to 1,133 pupils during the years from 1921-24 in the Las Animas schools.

tioned of Murdock and Sullivan, and Baldwin and Stecher. Although the latter employed an individual test, the curves show a remarkable agreement with the sex differences which our curves show. This study shows a pronounced separation of the curves at eight and nine years of age and then again at the ages from eleven to fifteen, which ages show such a pronounced

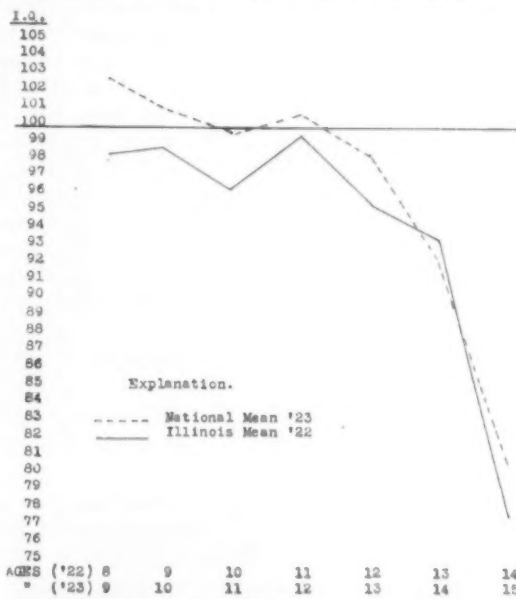


CHART 2.  
Mental growth curves for 187 pupils (mean both sexes) who were retested after an interval of one year. The Illinois group test was used in 1922 and the National group test in 1923.

difference in our curves. These two points of divergence are apparent in the curves for average cases as well as in the curves for the superior cases of the B. and S. experiment. Also, in this work we find at certain ages particularly at twelve, thirteen, and fourteen a decided I.Q. difference which amounts to as much as six or seven points.

Attention should be called here to the difference in boys and girls in standard deviation. We find that the boys at the ages of eight, nine, twelve, fourteen, fifteen, and again at seventeen,

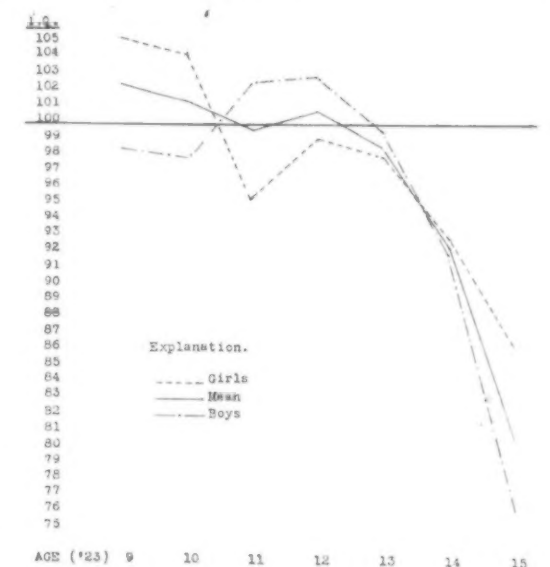


CHART 4.

Mean intelligence curve with mental growth curves for boys and girls plotted separately at each life age from 9-15 for 1923 (National test). The cases are identical with charts two and three. The pupils at nine years of age are identical with the eight year olds in chart three, etc.

that age. A girl with an I.Q. of 97 would be considered an average girl if we did not possess the knowledge that 101 were the true mean for girls. This illustration, of course, takes an age at which there is an extreme point of difference, yet the difference is sufficient to substantiate our contention that injustice would be done.

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# THE CONSULTING MECHANICAL EQUIPMENT ENGINEER: HIS SERVICES AND THE BOARD OF EDUCATION

## Part II— The Employment of Engineers, Their Qualifications, and Services

Carleton F. Tweed, C.E., Chicago, Ill.

In the first half of this paper it was pointed out that the unsatisfactory results usually obtained as regards the mechanical equipment of school buildings are due to certain abuses commonly practiced by the architect on the mechanical equipment engineer which have prevented him from rendering his best possible service in the interest of the principal party, the owner.

These abuses and the complications which resulted therefrom, were similar to those which resulted in the general discontinuance of the practice of employing general contractors who were authorized to employ sub-contractors for installing mechanical equipment.

That the new method of directly employing contractors for mechanical equipment is good procedure cannot be questioned. The heating or ventilating contractor, the plumbing contractor, and the electrical contractor who do the work directly for the owner feel their responsibility more keenly and receive their money promptly when the work is done. They know also that the work is more likely to be appreciated, than when it is done for another person or firm who is only an intermediary. It is only natural that through direct contract work the quality of work improves.

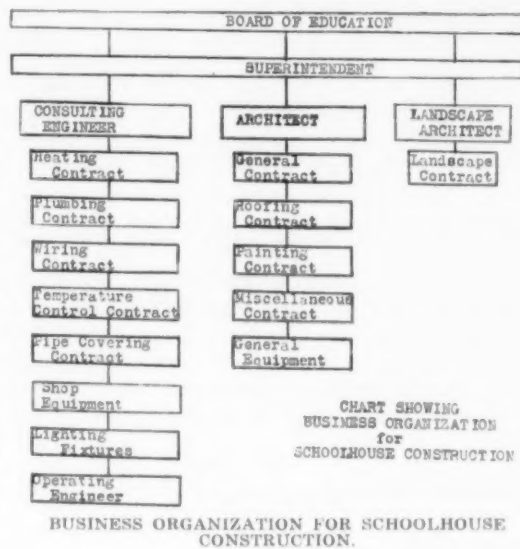
Such is the identical case with the mechanical equipment engineer. The present chaos in the employment and service of mechanical equipment engineers can only be corrected when the contracts for mechanical equipment engineering are so worded that the engineer is responsible to the owner alone.

When a man needs legal services, he hires a lawyer. When he is ill, he goes to a doctor. When he wants engineering services, why should he not go to an engineer? Why should he depend upon an intermediary—an architect? The answer is that most owners do not have a full comprehension of the size of engineering problems, when they set out to erect a large building, such as a schoolhouse. They do not realize the importance of the direct service of the consulting engineer, until some time after the architect has quietly taken the contract for this part of the work along with his own contract, and has the plans well under way or perhaps even completed.

The remedy for this lack of knowledge on the part of the owner is a better understanding of the services of the mechanical equipment engineer, and an understanding of the training and experience which are necessary for this type of service.

Perhaps mechanical consulting engineers as a class are responsible for the situation, in that they have not secured adequate publicity for themselves and their profession.

In the accompanying chart, the best order of business organization for school construction is shown. Here the school community appoints the school board which in turn selects the architect and the mechanical equipment engineer. After the contracts are let, the mechanical equipment engineer controls the mechanical contractors and instructs the operating engineer in the proper care of the new equipment, and the architect controls the general and miscellaneous building contracts. The work of these contractors are then united to form a finished and complete building, and all disputes are carried back through the engineer or architect to the school board for final judgment. The architect does not interfere with the engi-



neer or in any way accept any responsibility for the mechanical features of the building; and, vice versa, the engineer does not interfere with the architect or accept any responsibility for the structural features of the building.

To provide a guide for the school building committees and superintendents of schools who are interested in the planning and construction of new buildings, the following qualifications of mechanical equipment engineers and the following standards of service are listed. It is recommended that this work be handled under direct contract for a stated fee of six per cent on the cost of the work, and that engineers who secure work be required to give proof of their experience and training, just as architects are required to give proof of their experience and efficiency.

### A. Reputation

1. School boards who employ consulting equipment engineers should be certain that the engineers can furnish adequate recommendations from other school boards for school building work, done under direct contract or for experienced school architects.

The safest guide in employing a school architect is the reputation which he has gained through constructing satisfactory school buildings. The efficiency and honesty of an architect can best be determined by independent investigation. These same principles apply to consulting mechanical equipment engineers.

2. It is essential that engineers come well recommended by architects. An engineer can render satisfactory service only when he is on friendly terms with an architect. Some architects there will be, who are always glad to furnish recommendations for engineers who have done satisfactory service. These architects realize that both the engineer and the architect gain by satisfactory connections. Those architects who insist upon employing engineers on a salary basis, and who prefer to control the work of engineering for their own profit are likely to be the critics of engineers.

3. The architects for whom engineers have done work should be looked to for aid in choosing engineers. Unless there is the proper spirit of cooperation, and a knowledge of what the architect has a right to expect in the way of services, complications will arise. Still, the school building committee may well put up with a few petty complications with the architect and the engineer, and act as a judge in the mat-

ter rather than run the usual risk of obtaining a badly equipped building.

4. It may be stated as a rule, that those consulting mechanical equipment engineers whose experience in school work has been the longest and largest are most successful and cheapest.

### B. The Service to School Boards

1. School boards are entitled to all the consultation service necessary to satisfy their own demands for a comprehensive understanding of what the work is to include and how it is to be carried out. This service is in addition to all the plans and specifications and the supervision of the work.

2. When a building is completed, the consulting mechanical equipment engineer should furnish complete instructions to the operating engineer, concerning the operation and care of the equipment.

3. The board of education should retain the privilege of requesting that the consulting mechanical equipment engineer furnish instructions to each new operating engineer they employ, should a change be made at any time after the building has been completed. This kind of special service is expensive for the consulting mechanical equipment engineer, but it is worth while because it is proof to the school board that it has the cooperation of a real service organization. Incidentally, the engineer receives the advertising value from this kind of service, which is worth whatever it costs.

### C. Plans and Specifications

1. Before selecting a mechanical equipment engineer, it is desirable to demand that he show ample plans and specifications of work done for other schools. It cannot be emphasized too strongly that it is important to have good working drawings, presenting every item connected with a building. These drawings should be made to scale and should be so complete and understandable, that the contractor who secures the work can turn the drawings over to his foreman and then proceed to install the complete equipment exactly as drawn.

2. Many consulting mechanical equipment engineers have adopted the policy of drawing all heating, ventilating, plumbing, and electrical work together, on one drawing of each floor plan. This practice complicates the plans to such an extent, that it sometimes is utterly impossible to read the details of half of what is shown. This class of engineers should be avoided, as such plans invariably involve numerous extras.

3. A two-story school building should have ten or more sheets of mechanical equipment plans, and a three-story school building should have twelve sheets or more, as follows:

#### Two-Story School

1. Basement plan showing heating and ventilating work.
2. First floor plan showing heating and ventilating work.
3. Second floor plan showing heating and ventilating work.
4. Attic floor plan showing heating and ventilating work.
5. Basement plan showing plumbing and electrical work.
6. First floor plan showing plumbing and electrical work.
7. Second floor plan showing plumbing and electrical work.

(Concluded on Page 129)

## School Transportation in Massachusetts

"Transportation of children to school is each year becoming a larger problem and a greater financial charge upon the various towns and cities of the state. With the widespread acceptance of the fact that centralized schools are most efficient, and with the provision of quicker, safer, and more comfortable transportation, together with better care of the children while at school, the greatest objections to the conveyance of children to school have been removed."

This is the introductory paragraph to a study on school transportation in Massachusetts, made by a committee of schoolmen consisting of Chauncey F. Ferguson, Albert S. Cole, Chester R. Stacy and Burr F. Jones.

The committee found that in 1889, there were 104 towns and cities in Massachusetts engaged in the transportation of pupils, at a cost of \$22,118. Since that time the number has been increased to 339, and the cost has risen to \$1,291,702.

### Causes for Growth

The causes for this rapid growth in the transportation of children are given as follows:

1. The demonstration of the greater efficiency of the centralized school.
2. The increasing difficulties in economically administering the district school with its decreasing enrollment.
3. The provision of quicker, safer, and more comfortable transportation, and better care of the children while away from home.
4. The rapid growth of population in areas beyond the limits from which children could walk to established schools.
5. The increasing demands of parents to have the transportation limits set nearer and nearer the school.

The total number of pupils carried was 37,743.

Three per cent of the children are carried to one-room schools, 66 per cent to elementary schools of two or more rooms, eighteen per cent to high schools in town, eight per cent to high schools out of town, three per cent to vocational and other schools, and two per cent to schools not classified. The figures show a decrease in the proportion of those conveyed to the one-teacher school and an increase in the proportion of those conveyed to high schools.

The records also show that nine per cent were carried by horse-drawn vehicles, 51 per cent by motor busses and 32 per cent by electric cars. The total mileage covered was 9,526 miles. The wagons made an average of nine miles, the motor busses thirteen miles.

Thirty per cent of the vehicles used for conveyance of pupils are horse-drawn and 70 per cent motor driven. Of the horse-drawn vehicles, 33 per cent are open wagons, 57 per cent closed wagons without windows, and ten per cent closed wagons with windows. Of the motor cars twelve per cent are open touring cars, twelve per cent closed touring cars, 42 per cent auto busses with top and side curtains, and 34 per cent closed auto busses with stationary top and windows. The figures show a decided tendency toward the use of auto busses. The type with stationary top and windows is fast coming into general use.

The committee recommends that "It should be a closed car with stationary top and windows, should have a seat for every child carried, should have a door controlled by the driver, should have steps low enough for small children, and should have some provision to keep the children warm in winter."

The average cost per day per pupil is eight cents more by horse-drawn vehicles than by auto busses. For auto busses it ranges from nineteen to 21 cents and for wagons from 20 to 36 cents.

### Regulations for Motor Bus Drivers

The regulations governing the duties of motor bus drivers deemed best by the committee were compiled by J. F. Abel and read as follows:

1. No one but the driver shall occupy the driver's seat in the bus.
2. The bus must be brought to a full stop before taking on or letting off pupils.
3. All busses must be brought to a full stop at least 25 feet from any steam or electric railway crossing.
4. The driver must not leave the bus while

the motor is running and the motor must not be in gear when the bus is stopped.

5. When more than one bus is running they shall be at least 75 yards apart.

6. Bus doors shall be kept closed.

7. Children shall not be allowed to put heads or hands outside of the bus window.

8. Unless by special permission, no pupils shall be permitted to leave the bus at any station other than at his regular stop.

9. Drivers shall report all cases of disorder or disobedience on part of pupils to teacher or principal.

10. Gasoline tanks shall not be filled while there are any children in the vehicle.

## A Bequest for School Employees

Through the death of Mr. Simon Gratz, a former member of the Philadelphia board of education, who served continuously in that body for 53 years, the school teachers of Philadelphia, as well as the clerical assistants in the schools, are made beneficiaries of a bequest contained in his will.

### EENY, MEENY, MINY, MO

Frances Wright Turner

I sat on an old park seat today  
Watching the children at their play,  
And somehow, something I heard them say  
Brought me a glow from yesterday.  
We used to say it too, just so—  
"Eeny, meeny, miny, mo."

They all came back to me, dear old days,  
With schoolyard games, and schoolyard plays;  
The scurrying sound of childish feet  
As each one scrambled to reach his seat;  
Faces with rosy, laughing glow  
From "Eeny, meeny, miny, mo."

When the years go on, and the eyes grow dim,  
And the old tree totters in every limb,  
And the heart turns back to childish ways,  
And we wander back to our yesterdays,  
Then we hear it again, and it sounds just so—  
"Eeny, meeny, miny, mo."

Ah, the happiest dreams along Life's way  
That linger long in its twilight grey,  
Are those of a happy childhood's past.  
And the echo that clings to the very last  
Is that from the school days of long ago  
With their "Eeny, meeny, miny, mo."

Under the will, one-third of the residue of the estate, approximated at something less than one million dollars, is left to the city of Philadelphia in trust, to invest the same and to pay the income arising from the said investment to such person or persons at such times and in

such amounts, as the board of public education of the school district shall direct, for the purpose of affording financial relief in special cases of teachers and clerical employees in need of assistance and who cannot obtain it elsewhere.

In addition, it is specifically provided that the sum of fifty thousand dollars is to be reserved for the establishment of a private room in the hospital of the Jefferson Medical College for the sole use of the teachers in the Philadelphia schools, whether in active service or in retirement from the service. It is further provided that the management of such a room shall be subject to the general regulations of the hospital, and shall be vested in a committee of teachers consisting of the principals of certain schools.

The executor, under the will, is given a year in which to make his first accounting to the court. After the fund is paid to the board of city trusts, it will be another year before the income from the fund is determined as to amount, and before it is advisable for distribution. The estate is valued at about \$850,000, and out of this amount there must be provided five special bequests amounting to something over \$100,000, and in addition, the collateral inheritance tax and the executor's commission.

The bequest is not in the nature of a pension or annuity for teachers, but is rather a fund for affording relief to present or past teachers in need of financial assistance. The bequest is indicative of the intense interest of Mr. Gratz in the public school system during his long term of active service. His work was constructive in character, but he displayed more interest in the educational side than in the physical needs of the system. He was always an ardent advocate for advancement in the remuneration of the teachers, and was ever ready to lend his aid and influence in their behalf.

## Custodial Care of School Property

In the evolution of municipal government whereby the administration of the schools has become a separate branch of such government, such separation has not in every instance carried with it the transfer of power for independent action.

Obviously the machinery for exacting the necessary tax tribute and its distribution has remained with the regular local government. Likewise has the power to apportion the school support, as against the support to be accorded to other branches of government, been left in the hands of a central authority unless otherwise fixed by special state legislation in the form of a mill tax.

Notwithstanding the recognized expediency of separating the administration of the schools as a distinctive branch of the general municipal government, there are instances where most annoying entanglements still remain. In other

words, the separation is incomplete.

An inquiry made in Massachusetts during the present year has demonstrated that, for instance, in the matter of the custodial care of school buildings, not all boards of education enjoy the independence of action that logically comes within their province.

A committee of prominent educators sought an answer to the following questions: Does the school committee have full control, partial control, or no control over school buildings? The answer is that:

"Two hundred ninety towns and cities reported that the school committee has full control of school property. This represents 93 per cent of the whole number answering the inquiry. Eighteen municipalities reported that the school committee has partial control, and three that it has no control over school property. Taking the situation as a whole, the re-



plies might be interpreted as representing a very satisfactory condition with reference to the control of school property by school committees."

The situation is less favorable when the returns from the cities are analyzed separately. In 24 cities, or 70 per cent of the number the school board has full control. In seven, or 21 per cent, that body has partial control, and in two cities, it has no control. The investigation did not include the question as to what authorities control the construction of schoolhouses.

In touching upon the question of new buildings, the report says: "In one city during the last three years, five new schoolhouses have been built by five separate and independent building committees appointed by the mayor. At one time no less than four of these committees were operating. It is impossible, under these conditions for the school officials to keep sufficiently in touch with the plans and building operations to insure a reasonable degree of attention to proper educational and administrative facilities in the buildings. Building monstrosities, financial waste, and lack of attention to educational and administrative needs are more liable to occur in cities in which the school committees do not have authority in the planning and building of new schoolhouses."

The report, however, which concerns itself in the main with the custodial care of school property brings out the following significant statement: "The repairing of school property is also placed in the hands of various agencies. Repairs should be wholly under the authority of the school committee. If a door of a schoolhouse is broken from its hinges it seems ridiculous that the school department should not have authority to have a janitor replace it, and yet there are Massachusetts cities in which it is necessary for the school authorities to call in some other department to rehang the door at an additional cost to the taxpayers."

And then voices its conclusions in the following language: "It is self-evident that where the school itself is operated by one department, as the school committee, and the building which the school occupies is in charge of another department, there will inevitably result confusion and conflict of authority, and very likely friction and inefficiency. The school building is an essential part of the school organization; its cleanliness, its heating and ventilation, and its

proper repair are all necessarily involved in the successful conduct of the school, and all these things should be managed harmoniously with the school itself, in order that the school may perform its function to the best advantage. This desirable harmony of action cannot be attained by separating and intrusting to several independent authorities these closely associated features of school administration. It is anomalous and illogical to hold the school committee accountable for the proper education of children, and at the same time to give it little or no authority over the buildings in which the children are taught; to charge it with the responsibility for adequate educational results, and yet to deny it control of factors which may seriously impair school efficiency.

"And conversely, it is equally unreasonable to clothe with power in the matter of the care and physical condition of school buildings a municipal body entirely unrelated to the problem of public education. Furthermore, the school committee has always available first-hand information of the condition of school property. It is the only department specifically interested in the school, and, more than that, it is charged with the duty of successful school administration. It, therefore, has the means of information and the motive that would lead to the prompt application of the proper remedy to any unsatisfactory condition. Where the care of school buildings is made the business of any other municipal agency, this direct means of information and this incentive to immediate action are alike lacking. It is easy to see that unfortunate delays and other eventualities no less undesirable cannot fail to result. The welfare of the schools and their highest efficiency require that all conditions should be favorable; that all factors entering into the conduct of the school shall cooperate in perfect accord, and this, it is clear, can be accomplished only under one central authority—the school committee."

The situation, so far as Massachusetts is concerned, is well stated in the above. But, there are other states where boards of education are interfered with by city councils, or other local bodies, and thus are prevented from exercising the function which properly belongs to them. The conclusions which the Massachusetts committee has reached are applicable to all cities where a divided authority holds sway.

## When Parents Are Pupils!

Full-flavored is the taste of grade work in the modern public school administered in large doses to the parents of Seattle. In this leading city of the northwest, parents are sent back to school for one night, at least, during the semester. In a few brief hours they are actual pupils again, harkening to a modern high school teacher, dispensing present day education as it is presented to their young sons and daughters of the popular "hi". The only benefit, however, derived from this night at school for parents is a true picture and real appreciation of the instruction given to their children.

Every high school in this progressive city of Washington state has adopted the plan of "School Night for Parents." This "night" has in a short time become one of the most important features of the high school's cooperation with the parents of its school. In this manner an interest in the work of the child is pleasantly forced upon the parent. Through attending classes in the schoolroom he is given a first-hand opportunity to see the detailed workings of the plan of education provided for his offspring. He knows exactly how the tax money is expended, and is able to appreciate

the problems of the school board, as well as the problems given his sons and daughters.

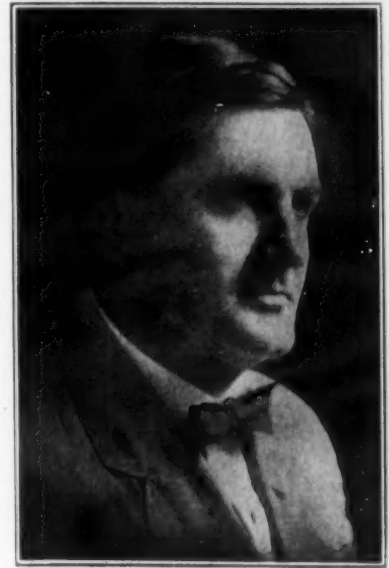
Under the arrangement adopted by the high schools of Seattle, the "Back to School Night" for parents is now an established and well attended institution. The old excuse of tardiness for parents, or lack of attendance, are frowned upon as much as when the parents attended school years and years ago, when education was not presented as today.

When parents return to school to become pupils for the evening, they are requested to occupy the same desks and chairs at which their sons or daughters recite during the day. They are given a portion of the class work, and are shown the inside workings of the school routine. Each department shows how the children rotate at the ringing of the bell from class to class, from study to study, and the subjects of the curriculum are explained in detail to parents. Besides the class work on this night, there are usually addresses and refreshments served as a form of entertainment.

So successful has the "back-to-school night" been since its establishment that all high schools of the city were quick to adopt this feature for effectively cooperating with parents.

## H. V. WATKINS Jackson, Mississippi

For twelve years H. V. Watkins has served as President of the Board of Education of Jackson, Mississippi. During this period of service Jackson, a comparatively small city, has invested more than a million dollars in school buildings and school improvement. This city has recently completed an expenditure of five hundred thousand dollars in providing a modern high school.



H. V. WATKINS,  
President of the Board of Education,  
Jackson, Miss.

Mr. Watkins was born in Jefferson County, Mississippi, and received his educational training in the public schools of Jackson and at Millsaps College. He studied law at the University of Mississippi, and at the age of twenty-one began the practice of law in Jackson. During the past twenty years he has built up a clientele that is not confined to the boundaries of the state. He is officially identified with probably the largest banking interests in the city, the largest Building & Loan interests, and is a director of the largest local insurance company. Despite this variety of interest, he gives freely of his time and his thought and his attention to the administration of the public schools of Jackson, and he brings to all school matters the same intensive study, critical analysis and sound judgment that characterizes him in the conduct of his own personal and professional business.

## THE RETIREMENT OF TEACHERS IN SAN FRANCISCO

In November, 1924, the voters of San Francisco adopted an amendment to the city charter under which the teachers of the public schools were made eligible to membership in a city retirement salary system. The amendment became effective in October, 1925, and under its provisions 39 teachers were retired on that date. The law permits teachers to retire voluntarily upon attaining the age of 62, but provides for compulsory retirement on the part of teachers who have attained the age of 70. A retirement salary of \$500 a year is allowed to those who have taught thirty years, and the city makes a liberal addition to the allowance.

Supt. J. M. Gwinn, in a speech given on October 31st in honor of the retired teachers, produced figures showing that each of the 39 teachers retired at that time had been worth \$2,430,000 to the city of San Francisco and to the other communities touched by her pupils. Each of the teachers had taught an average of 9,000 days, with an average of thirty pupils in attendance each day, making a total of 270,000 days of education. It was estimated that each day's education increased the economic value of

(Concluded on Page 129)

# Rate and Causes of Turnover of Iowa Teachers

Wendell White, Minneapolis, Minn.

Information concerning the rate and causes of changes in personnel of the teaching staffs is of value to superintendents, members of school boards, administrators of training institutions, and state legislators from the standpoint of teacher employment and teacher training to the extent to which such information assists in predicting and controlling changes in personnel. To these persons this problem is one of personnel management. Such information is of vocational significance to teachers themselves to the extent to which it reveals to them reasons for which they may anticipate changes in their employment, and methods by which they may control the same. A solution of the problem of turnover necessitates a participation on the part of teachers which is made possible only through their being informed as to its extent and causes.

It is generally held that the mobility of teachers is in excess to that which should obtain for the best interests of education, and various causes are attributed to the frequent terminations of employment. Furthermore, policies are being recommended and put into operation with a view of decreasing this mobility. There is, however, very little reliable information concerning either the extent of changes in personnel or the causes underlying these changes. A need, therefore, exists for an investigation of this phase of the personnel problem. A full treatment of the problem would necessitate separate studies for the teachers of each division of service. The present investigation, however, is restricted to the two general divisions: elementary teachers (kindergarten to eighth grade, inclusive) and high school teachers (ninth grade to twelfth grade, inclusive). Again, as the rate and causes of turnover appeared obviously to obtain somewhat in accord with the sizes of cities it was decided to make separate studies for each of eleven groupings made on the basis of city population. Further, an analysis of changes in personnel reveals that they may be classified as follows: First, those which occur when teachers move from one position to another within a given school system; second, those which occur when teachers leave a given school system. The writer is aware of the value which a study of changes of the former classification would have. However, finding it necessary to restrict his study, he has devoted this investigation to changes of the latter classification, which appeared to him to be the ones of primary concern.

## General Causes for Changes

A speculation as to the causes of changes in personnel reveals that a study of such causes presents a vast and complex problem. It is obvious that a determination of these causes, because of the large number of factors to be taken into consideration, would necessitate a comprehensive inquiry. It appeared, however, that there are certain general categories which include most of the causes. Accordingly, the following general causes were selected for this investigation:

1. Failure to make good.
2. Quitting the teaching profession.
3. Quitting for further training.
4. Quitting for better positions.

There are three possible sources of data for an investigation such as this—statements or records of superintendents, members of school boards, and teachers. The most valid procedure would be to obtain the data from all three sources. The data for this investigation, however, rest on statements of superintendents only submitted in response to a questionnaire. This fact must be recognized as a source of error.

However, the various parts of the questionnaire were so designed and so arranged as to provide two checks on the data submitted by the superintendent not readily ascertainable by him. These checks did not verify all of the data submitted, but they constituted an index to the probable accuracy of the unverified data in that they evidenced the conscious effort put forth by the superintendent to give accurate information. As a result of these checks, twelve per cent of the returns were eliminated.

Since the rate and causes of turnover may vary from time to time, another important factor in both of these studies is the period for which they are made. It would of course be desirable that the studies be made for a representative year or series of years. For practicable reasons, however, the writer has arbitrarily chosen for this study two years, the one beginning with the opening of the school year, 1923, and closing with the opening of the school year, 1924, the other beginning with the opening of the school year, 1922, and closing with the opening of the school year, 1923. Accordingly this investigation consists of the following divisions:

- I. A study of the rate of turnover of,
  - (a) Elementary teachers for,
    1. The year 1923-24
    2. The year 1922-23
  - (b) High school teachers for,
    1. The year 1923-24
    2. The year 1922-23
- II. A study of certain causes of turnover of,
  - (a) Elementary teachers for,
    1. The year 1923-24
    2. The year 1922-23
  - (b) High school teachers for,
    1. The year 1923-24
    2. The year 1922-23

## Turnover vs. Tenure

Various methods have been employed in expressing changes in personnel. In education such changes have been expressed almost wholly in terms of tenure. In personnel management in industry such changes have been expressed in terms of turnover. Furthermore, the methods which have been employed in the computation of turnover are numerous. The writer has chosen "rate of turnover" in preference to "tenure" as a means of expressing changes in personnel, and has made his computations by one of the methods employed in the computation of turnover in industry. It, therefore, becomes necessary to point out the value of studies of turnover over studies of tenure and to evaluate the various methods of computing turnover. Before doing so, however, it becomes necessary to point out that the term tenure is not restricted to the above usage. Unfortunately, its meaning as an expression of the average length of service of teachers in the profession irrespective of the number of changes in positions, is equally well established. The writer, however, in this discussion uses the term tenure in the former sense only, and does not take up a criticism of investigations of the latter type, for they do not purport to measure changes in personnel of the teaching staffs of schools, but to measure changes in personnel for profession as a whole, irrespective of the number of positions held, which is irrelevant to this investigation.

It should be obvious that an attempt to give quantitative expression to changes in personnel of the teaching staffs of schools in terms of tenure is impracticable. The rapid expansion in education calls for a large number of new teachers each year. These new additions to the teaching staffs due to an expansion in the system often affect appreciably the average tenure. For example, in the city of Baltimore<sup>1</sup> within the period from 1918-20, out of a total

of 841 new teachers employed, 577 or 68 per cent were added because of expansion in the system. Again it was found that about one-third<sup>2</sup> of the new teachers employed in California in the year 1921-22 were employed because of an expansion of the schools. In growing communities, therefore, figures on tenure represent not only the rate at which new teachers are added to replace others, but also the rate at which new teachers are added because of new positions having been created. Again, to attempt to express in terms of tenure changes in personnel for a school system which is contracting, is to introduce a similar source of error. Therefore, tenure studies for a school system which has been either expanding or contracting are impracticable.

Another objection which the writer raises to an attempt to express changes in personnel for the teaching staffs in terms of tenure is that such a procedure is impractical. Average tenure is a quantitative expression of the instability of teachers which cannot be further analyzed into quantities due to various factors operating as causes. It is interesting to know of the instability of teachers in toto, but such information is valuable for purposes of prediction and control only as it can be analyzed into quantities due to respective causes. It must be clearly recognized that some of the factors making for a brief tenure are of such a nature that one should not attempt to prevent their operation, and that other factors making for a brief tenure are of such a nature that they are beyond our control, and that still others are so wholly different from each other that their control requires entirely different methods. Therefore, information as to the length of tenure of teachers *per se* serves no practical end. Tenure studies, therefore, as means of expressing changes in personnel are both impracticable and impractical.

## Turnover: Its Meaning in Industry

The means of expressing changes in personnel of the teaching staffs adopted by the writer for this investigation is "rate of turnover". The term turnover according to the knowledge of the writer has been but vaguely used and only once defined in education. In industry where the term as an expression of changes of personnel was originated, its meaning unfortunately has not been standardized. The different ways in which turnover has been interpreted and applied are distressingly numerous. According to one view, turnover represents the number of persons added within a given period to the staff or payroll—the number of additions.<sup>3</sup> According to a second view, turnover represents the number of persons whose employment is discontinued within a given period—the number of separations.<sup>4</sup> Obviously the number of additions and the number of separations are not equal in an industry which is either expanding or contracting. According to a third view, turnover represents only the number of persons leaving who are actually replaced—the number of replacements.<sup>5</sup>

Again some personnel managers do not consider unavoidable changes in personnel as turnover as is revealed in the following quotation, "In the computation of turnover the number of replacements should not include those who die or those who leave because of marriage."<sup>6</sup> Often the term turnover is used to designate a ratio as is revealed in the following quotation, "Labor turnover is the ratio of the total number of employees hired to the average standing payroll for the year."<sup>7</sup> More frequently the term percentage of turnover is used to designate the ratio between the number of turnovers and some number taken as a base. This is revealed



in the following quotation, "The percentage of turnover for any period considered is the ratio of the total number of hirings during the period to the average number of employees on the force report."<sup>8</sup>

Again there is difference of opinion as to what is the base upon which the rate of turnover should be computed. Some hold that it is the number of persons employed.<sup>9</sup> Others hold that the base upon which the rate of turnover should be computed is the average daily or average monthly number reporting for work.<sup>10</sup> Those who hold that the number employed should be taken as the base in the computation of turnover disagree as to what constitutes the number employed. Some hold that it is the number employed at the opening of the period,<sup>11</sup> others hold that it is the number employed at the close of the period,<sup>12</sup> while still others hold that it is the average number employed for the period.<sup>13</sup> Observations made from an extensive examination of the literature<sup>14</sup> support the following generalizations made by very recent writers, "We have affected to speak wisely of labor mobility, turnover, and the like, without yet having found any standard method of determining its extent or taking its measure. The inevitable result of this situation is statistical and therefore mental chaos. It is never safe to accept turnover figures without first inquiring as to how the computation was made, the results obtained by each method being substantially different."<sup>15</sup> Another writer states, "Today statisticians continue to disagree as to the correct method of figuring the percentage of turnover for any given period."<sup>16</sup>

#### Turnover as Studied Here

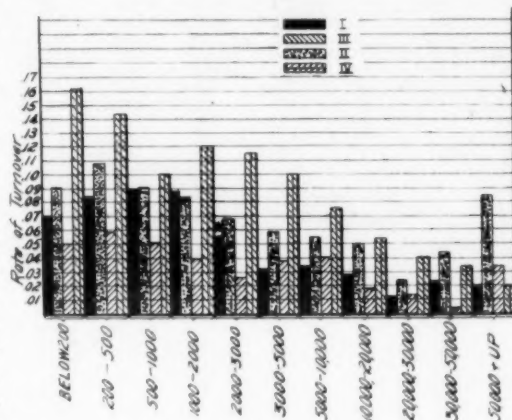
Since, as has been pointed out, there is neither a generally accepted terminology nor a standardized method of computing rate of turnover, a presentation of this investigation necessitates an assignment of precise and definite meanings to terms used, and a statement as to how the computations were made. The writer uses the term turnover as representing the number of replacements. The number of replacements in all cases, whether the school system is contracting or expanding, is taken to be the smaller of the two numbers: the number of additions and the number of separations. The term rate of turnover is used here as designating the per cent obtained from a ratio having for its numerator the number of turnovers, and having for its denominator the number employed.

A true representation of changes in personnel of the teaching staffs can be obtained by treating in the computation of the rate of turnover only the replacements as turnovers. One might proceed by using as turnovers the number of additions or the number of separations. But to employ the former method for a school system which is expanding would be to include as data the number of teachers who were added because of an expansion in the system. To employ the latter method for a school system which is contracting would be to include as data the number of teachers leaving because of a contraction in the school system. In either case, one would introduce the same source of error that arises in the computation of changes in personnel in terms of tenure. Such an error was committed in the Flint, Michigan, survey where the additions due to an expansion in the school system were included in the computation of the rate of turnover.<sup>17</sup>

#### Turnover as Teacher Replacement

By taking the replacements as turnovers in the computation of turnover, one is able to exclude both the number of additions due to an expansion and the number of separations due to a contraction in the school system. Therefore, the only practicable way of computing rate of turnover is by treating as turnovers the

number of replacements. The controversy as to what constitutes the base upon which the rate of turnover of personnel in industry should be computed, involves conditions which are not involved in the question as to what constitutes

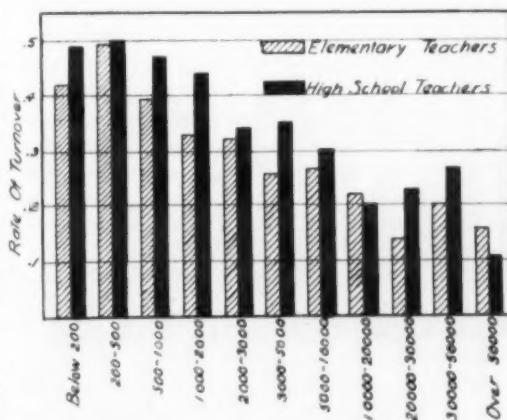


GRAPH I  
showing the rate of turnover for elementary teachers and for high school teachers for each of eleven city groups, 1922-1924.

the base upon which the rate of turnover of personnel in education should be computed. In industry the size of the working force frequently changes appreciably during the year. In education, on the other hand, changes in the size of the teaching staff occur almost wholly at the close of the year. For this reason the number employed at the opening of the year, at the close of the year, and the average number employed for the year may be said to be approximately equal. Therefore, it is not amiss to use as base the number employed at the opening of the year.

Again, there needs to be no controversy in education as there is in industry in regard to whether the number employed should be taken from the "payroll" or from the "average daily or average monthly work sheet". In education, unlike in industry, the number reporting daily for work may be said to be approximately equal to the number on the "payroll". For this reason it is quite inconsequential whether one obtains the number employed from the "payroll" or from the "average daily or average monthly work sheet". These views as to the method of computing the rate of turnover are shared by E. E. Lewis,<sup>18</sup> superintendent of schools, Flint, Michigan, and represent a method employed in the computation of rate of turnover in personnel management in industry.<sup>19</sup>

By the way of a summary, it may be said then that studies of the rate of turnover when made by the method outlined above are preferable to tenure studies for the following reasons. In the first place, they enable one to exclude from his data, as was pointed out above, both the number of teachers who are added because of an expansion and the number leaving because of a contraction in the system, while



GRAPH II  
showing rates of turnover for elementary teachers due to:  
1. Failure to make good.  
2. Quitting the teaching profession.  
3. Quitting for further training.  
4. Quitting for better position.

such cases, as was pointed out before, are not excluded in tenure studies. In the second place, the term rate of turnover is a quantitative expression of changes in personnel of the teaching staffs which can be resolved into quantitatatives due to the various causes. As has been pointed out, tenure studies do not lend themselves to such analysis. For these reasons it was decided to make this investigation of changes in personnel in terms of rate of turnover.

#### The Results of the Study

It was found that the rate and causes of turnover obtained rather uniformly for the two periods for which this study was made. It was, therefore, decided, in consideration of space, to give here only a consolidated report of the findings for the two periods. The results of the first part of this investigation (a study of the rate of turnover) are revealed by the following graphs and tables.

TABLE I.—The Rate of Turnover of Elementary Teachers, 1922-24

City Population Groups	Total Number Employed	Total Number of Turnovers	Rate of Turnover
Below 200	577	239	.414
200-500	790	394	.498
500-1,000	1172	459	.391
1,000-2,000	995	354	.355
2,000-3,000	469	151	.321
3,000-5,000	489	130	.265
5,000-10,000	689	192	.278
10,000-20,000	317	71	.223
20,000-30,000	806	128	.142
30,000-50,000	650	135	.207
50,000 and Above	1542	248	.160
For All Cities	8585	2501	.291

TABLE II.—The Rate of Turnover of High School Teachers, 1922-24

City Population Groups	Total Number Employed	Total Number of Turnovers	Rate of Turnover
Below 200	430	211	.490
200-500	613	311	.507
500-1,000	900	434	.482
1,000-2,000	800	381	.443
2,000-3,000	332	114	.343
3,000-5,000	354	126	.355
5,000-10,000	425	129	.303
10,000-20,000	172	35	.203
20,000-30,000	381	91	.238
30,000-50,000	218	59	.270
50,000 and Above	609	69	.113
For All Cities	5294	1960	.370

The Graph I and Tables I and II reveal that the rate of turnover tends to obtain in accord with the sizes of cities, ranging for elementary teachers from fourteen per cent to 50 per cent, and for high school teachers from eleven per cent to 51 per cent. The average rate of turnover for elementary teachers and for high school teachers respectively was found to be 29 per cent and 37 per cent. It cannot be said on the basis of this study that the turnover for either the smaller cities or for the cities as a whole is excessive. Such an interpretation can be made only in the light of information as to its underlying causes.

The findings of the second part of this investigation (a study of the rates of turnover due to certain causes) are revealed by the following graphs and tables:

#### Relative Importance of Reasons for Changes

These graphs and Tables III and IV indicate that the causes of turnover investigated operate for elementary teachers in toto and for high school teachers in toto in the following order of magnitude, (1) quitting for better position, (2) quitting the teaching profession, (3) failure to make good, and (4) quitting for further training. This order, however, does not obtain for each of the city groups. It is very pronounced in the smaller cities, and remains constant but decreases in significance in the larger cities up to those having a population of 30,000 in the case of elementary teachers, and up to those having a population of 50,000 in the case of high school teachers.

In cities of these sizes and above "quitting the teaching profession" increases over "quitting for better positions". These facts indicate that the rate of turnover due to quitting for better positions is the greatest factor causing turnover in the smaller communities, and that it decreases in relative importance in the larger cities. Furthermore, we find that the absolute

TABLE III.—The Rates of Turnover Due to Respective Causes for Elementary Teachers for 1922-24  
Number of Turnovers Due to:

City Popu- lation Groups	Total Number Employed	I	II	III	IV					Rates of Turnovers Due to:				Number of Turnovers Acc'ted For	Rate of Turnover Acc'ted For	Total Rate of Turnover	Rate of Turnover Unacc'ted For
		Failure to Make Good	Quitting Teaching Profession	Quitting for Further Training	Quitting for Better Position		I	II	III	IV							
					A Greater Future	B Larger Salary				(A and B)	A	B	(A and B)				
Below 200	577	39	53	29	38	56	94	.070	.091	.050	.065	.097	.162	215	.372	.414	.042
200- 500	790	67	86	47	44	69	113	.084	.108	.059	.055	.087	.143	313	.396	.498	.102
500- 1,000	1172	104	107	60	57	61	118	.088	.091	.051	.048	.052	.100	399	.340	.391	.051
1,000- 2,000	995	88	84	39	71	49	120	.088	.084	.039	.071	.049	.120	331	.332	.355	.023
2,000- 3,000	469	25	32	13	29	25	54	.053	.068	.027	.061	.053	.115	124	.264	.321	.057
3,000- 5,000	489	16	29	19	24	13	37	.032	.059	.038	.049	.026	.100	101	.206	.265	.059
5,000-10,000	689	24	38	28	26	43	69	.034	.055	.040	.037	.062	.075	159	.230	.278	.048
10,000-20,000	317	9	16	6	15	2	17	.028	.050	.018	.047	.006	.053	48	.151	.223	.072
20,000-30,000	896	11	22	12	23	14	37	.012	.024	.013	.025	.015	.041	92	.102	.142	.040
30,000-50,000	650	15	29	3	19	3	22	.023	.044	.004	.029	.004	.053	69	.106	.207	.101
50,000 and Up	1542	29	130	52	2	29	31	.018	.084	.033	.001	.018	.029	242	.156	.160	.004
All Cities	8585	427	646	308	348	364	712	.049	.075	.035	.040	.042	.082	2093	.243	.291	.048

TABLE IV.—The Rate of Turnover Due to Respective Causes for High School Teachers for 1922-24  
Number of Turnovers Due to:

City Popu- lation Groups	Total Number Employed	I	II	III	IV			Rates of Turnover Due to:					Number of Turnovers Acc'ted For	Rate of Turnover Acc'ted For	Total Rate of Turnover	Rate of Turnover Unacc'ted For	
		Failure to Make Good	Quitting Teaching Profession	Quitting for Further Training	Quitting for Better Position			I	II	III	IV						
					A Greater Future	B Larger Salary	(A and B)										
												A					B
Below 200	430	60	20	30	43	42	85	.139	.046	.009	.100	.097	.197	.195	.453	.490	.037
200- 500	613	60	44	28	35	50	85	.112	.071	.045	.057	.081	.138	.226	.368	.507	.139
500- 1,000	900	114	72	53	76	63	139	.126	.080	.058	.084	.070	.154	.378	.420	.482	.062
1,000- 2,000	860	83	72	32	76	70	146	.096	.083	.073	.088	.081	.169	.333	.387	.443	.056
2,000- 3,000	332	9	31	11	23	33	56	.027	.093	.033	.069	.009	.168	.107	.322	.343	.021
3,000- 5,000	354	21	29	14	20	34	54	.059	.081	.039	.056	.006	.152	.118	.333	.355	.022
5,000-10,000	425	26	24	8	15	35	50	.061	.066	.018	.035	.082	.117	.108	.254	.303	.049
10,000-20,000	172	4	8	7	8	3	11	.023	.046	.040	.046	.017	.063	.30	.174	.203	.029
20,000-30,000	381	8	26	11	17	15	32	.020	.068	.028	.044	.036	.083	.77	.202	.238	.036
30,000-50,000	218	7	7	1	8	3	11	.032	.032	.004	.036	.013	.050	.26	.119	.270	.151
50,000 and Up	609	4	29	4	1	20	21	.006	.047	.006	.001	.032	.034	.58	.095	.113	.018
All Cities	5294	405	362	199	322	368	690	.076	.068	.037	.060	.069	.130	1656	.312	.370	.058

turnover due to quitting for better positions, is greatest in the smaller communities and least in the larger communities. It may be said, therefore, that both the relative and the absolute turnover due to quitting for better positions varies conversely in accord with the sizes of cities. These facts indicate that the better positions, in the judgment of superintendents lie in the larger cities. Further, the rate of turnover due to this cause is one-third of the entire rate of turnover. The primary means by which turnover due to teachers leaving for better positions can be controlled, appears to be by the payment of larger salaries. The degree to which turnover due to this cause will be controlled is dependent upon two conditions: In the first place, it depends upon the willingness of communities to pay salaries sufficient to hold their teachers. In the second place, it depends upon the ability of communities to pay salaries sufficient to hold their better teachers. On the one hand, it may be said that, with a growing appreciation for competent teachers, communities are becoming more and more willing to pay salaries to hold the better teachers, and that, therefore, turnover due to this factor may be expected to decrease. On the other hand, it may be said that, with our present system of financing education, there are differences in abilities of communities, and that, therefore, turnover due to this factor may be expected to continue to the degree to which these inequalities exist.

A pertinent question is whether turnover due to teachers leaving for better positions constitutes a loss to society as a whole. The writer feels that such a position in the light of our present knowledge would not be justifiable. Obviously, however, turnover due to teachers leaving for better positions is of grave significance to the communities losing such teachers.

#### Marriage and Age as Reasons

As to the rate of turnover due to teachers quitting the teaching profession we find that it is quite uniform throughout the city groups. An investigation as to why teachers quit might reveal that there is a high turnover rate in the smaller cities due to marriage, and that this turnover rate is offset by a correspondingly high turnover rate in the larger cities due to retirement because of age. This turnover rate due to teachers leaving the teaching profession is in need of further analysis for purposes of prediction and control. To the degree to which such turnover takes place because of maladjustments it may be controlled, but to the degree to which it takes place because of marriage, retirement, age, or death, it may be said

that such turnover cannot be controlled, and that the major part of it will continue. Further, it is very probable that from a social standpoint such turnover is largely desirable.

As to the rate of turnover due to teachers failing to make good, it was found that this rate of turnover tends to obtain conversely in accordance with the sizes of cities. Any attempt to explain this fact in the light of our present knowledge would be highly speculative. This cause of turnover is in need of further analysis. For purposes of prediction and control, it is not enough to know the general extent of teacher failure, but we must also know the specific reasons why teachers fail. The information obtained in this investigation as to the magnitude of teacher failure is of value only in so far as it points out the extent, and hence the importance of this factor. However, to regard such turnover as an evil is to largely misplace emphasis. It is not so much that teachers who fail migrate, as it is that teachers fail that constitutes a social loss.

The rate of turnover due to teachers quitting for further training is quite uniform in cities having a population up to 10,000 in the case of elementary teachers, and in cities having a population up to 20,000 in the case of high school teachers. In cities larger than these this cause of turnover decreases. The reason for this appears to be that teachers, upon entering positions in larger cities, have more training than do teachers upon entering positions in smaller cities. It may be said that this rate of turnover will continue unless we raise the training requirements for certification of teachers. Furthermore, it may be said that under our present minimum training require-

ments turnover due to teachers leaving for further training is highly desirable.

The rate of turnover due to the operation of the above four mentioned causes combined was found to be for elementary teachers and for high school teachers respectively, 24 per cent and 31 per cent, leaving a rate of turnover of .05 per cent in the case of elementary teachers and .06 per cent in the case of high school teachers unaccounted for in this investigation.

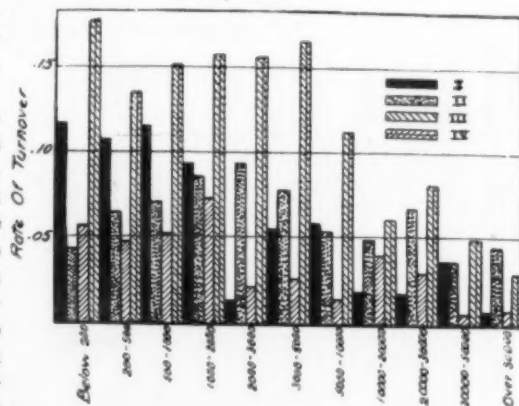
#### The Legislative Element

The findings of this investigation appear to be suggestive of the degree to which we may expect a continuation of turnover, and seem to indicate points for attack in attempting to control the same. To legislators the turnover found in this study to be due to quitting for better positions, quitting the teaching profession, and quitting for further training, should be indicative of the amount of turnover which cannot be appreciably decreased by tenure legislation. The turnover found to be due to teachers failing to make good should be suggestive to these persons of the degree to which tenure legislation, as a means of controlling changes in personnel, would in all probabilities prove to be ineffective or productive of malconditions. The information as to the turnover due to quitting for better position is of further value, on the one hand, to school administrators by revealing to them the degree to which they may expect to continue to lose their experienced teachers. On the other hand, such information should be suggestive to teachers of the degree to which they may anticipate promotion. The turnover found to be due to failure to make good is of value to all concerned with the personnel problem, but only in so far as it points out the magnitude, and hence the importance of this factor. For remedial purposes analyses of the reasons why teachers fail are necessary.

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(Concluded on Page 138)



GRAPH III  
showing the rate of turnover for high school teachers due to:

1. Failure to make good.
2. Quitting the teaching profession.
3. Quitting for further training.
4. Quitting for better position.



## The Work of the School Janitor

### VII. Blackboard, Eraser and Other Cleaning

Charles E. Reeves, Ph.D.

#### BLACKBOARD CLEANING

Blackboard cleaning is one of the jobs that janitors sometimes try to shift to teachers. In five of the eighteen schools studied, janitors seldom or never clean blackboards. In most of the others teachers find it necessary to clean them during the week. There is no defense for the performance of this work by teachers or pupils. This is not because the work of the teacher is on a higher plane than that of the school janitor but because, by the mere specialization of their work, the teacher is employed to teach and the janitor to keep the building and its equipment clean. The same is true of the cleaning of erasers, dusting and any other cleaning job that janitors tend to shift to teachers. All cleaning jobs should be performed by the janitor and should be performed with sufficient frequency so that the teacher will not need to supplement his work. Again, janitors should do cleaning jobs, such as cleaning blackboards, because they can do them better and much more rapidly than can teachers. First, they are more skilled through experience in methods of procedure, appliances to use, etc., and second, they perform the work for an entire building, while each teacher must get the cleaning materials ready to clean but one room, which is a distinct waste of time.

The condition of blackboards, erasers, and chalk trays where janitors did the work were, as a rule, far superior to their condition in schools in which this work was left to teachers. Where teachers or pupils washed blackboards, the boards were very streaked. Almost invariably the slower and poorer methods had been used. There was none of the smooth, even blackboard cleaning that was secured by the better methods used by the majority of janitors. Hence, because all jobs of cleaning school buildings, by their very nature, are "janitors' jobs", and because janitors can secure superior results at a total saving of time, we must conclude that all cleaning jobs should be performed by janitors.

*Frequency and Time of Cleaning Blackboards:* Twenty-five rules and regulations made frequency specifications for blackboard cleaning, 23 of which required the work to be performed weekly. Fourteen others stated that it should be performed "as often as necessary" or "as directed". In eleven of the schools observed, blackboards were washed weekly, in one school twice per week and in one school daily.

Though requirements and practices largely agree, weekly is not sufficiently frequent for the performance of this job. Teachers had to supplement the work in the schools observed. It is important that blackboards be kept clean both from the standpoints of health and the desirability of keeping them in condition for effective use, and the work should not be required of teachers.

In observing the condition of blackboards on various days of the week, it was noticed that the blackboards of some rooms and some blackboards in each room were used much more than others. Often a portion of the front blackboard is used most; sometimes a portion or all of a side blackboard; seldom a back one. In order to keep blackboards in good condition it is, therefore, suggested that janitors clean all blackboards thoroughly once each week, and those receiving most usage two or three times per week, according to their need.

Saturday seems to be, in practice, the day for cleaning blackboards, although some janitors prefer to clean them on Friday afternoons, leaving the sweeping until Saturday morning.

Blackboards cleaned during the week will have to be cleaned during the noon intermissions or after dismissal even if this slightly lengthens the janitor's day.

*Conditions Affecting Blackboard Cleaning:* Slate blackboards are most easily cleaned. The smoother the slate, the better, from the standpoint of effectiveness in cleaning. The rapid two-hand methods of procedure cannot be used advantageously on rough blackboards or those warped out of shape. Pencil and crayon marks should not be permitted on blackboards. They are difficult to clean by usual methods.

*Tools, Appliances and Agents for Blackboard Cleaning:* A number of time studies have been made to determine which are the best tools and appliances, cleaning agents, and methods of procedure to use. The quality of results secured have also been considered. The five-point system of grading was again used, with the following criterion as a basis for judgments: "In blackboard cleaning, those results are best in which, all space being covered, there are the fewest streaks remaining." "Streakedness" may be determined by the evenness of drying and the marks of materials used for cleaning. Experiments were made for the various combinations of appliances, agents, and methods of procedure, under controlled conditions, the time in each case being reduced, for comparison, to time required to clean 100 square feet of blackboard area. The most common appliance used was the towel with water as the agent, sometimes with both hands, sometimes with one. Next was the use of the towel, stick, and water. Others found in use were a sponge, water, and drying cloth; a towel, tacked to a stick and water; a cotton flannel cloth dipped in kerosene and dried for two days before using; a sponge and water. The appliance and agent; "towel, stick and water," means that a towel is frequently rinsed in water is rolled about a stick, or folded and pressed to the blackboard with a stick. The stick is usually about 24"x3/4"x3/4", and moved while pressed against the smooth slate blackboard. The "towel tacked to a stick" was used in the same way by an inexperienced janitor. In this case it was difficult to wash the towel and the results were poor because the towel catches and holds the dirt. In making experiments the "towel tacked to a stick" and the "sponge, water, and dry cloth" were omitted, the first as being obviously too ineffective in results and the second as being too slow.

The following appliances and agents were considered in determining most effective methods for use: (1) Sponge and clear water. (2) cotton flannel cloth dipped in kerosene and dried out, (3) towel and clear water, (4) towel, stick, and clear water. Kerosene in the water probably has little effect upon the quality of results, when used in small quantities. If used too freely streaks will result. As a towel for washing blackboards, a bath towel or a soft mop towel are found to be superior. From the observations of janitors at work, using the various methods, it was found that the sponge and water accomplished poor results, and were graded 4, while the other three named above accomplished the best results and graded 1. It was found that the towel and water used with two hands was most rapid, it requiring 3.1 minutes to clean 100 square feet of blackboard area, as compared to 4.2 minutes by means of the towel, stick and water; 6.8 minutes by means of the kerosene cloth; and 5.8 minutes by means of the sponge and water. The towel, stick, and water was, therefore, second in rapidity, but would have required less time than is

here shown if the particular janitor observed using this method, had covered the blackboard three times instead of four. The one-hand method required in using the sponge or the kerosene cloth is naturally slower since it covers such a small amount of space at a stroke.

Similar results were secured from experiments when used by the various methods. The results secured by use of the sponge and water again graded low, 3, or "fair", while other methods graded 1, or "excellent". The stick, towel and water was the most rapid appliance to use by the up and down method, it requiring 220 seconds, on the average, to clean 100 square feet of blackboard area, as compared to an average of 348 seconds by the one-hand methods. When the back-and-forth method was used for the various appliances, the towel and water used with both hands was most rapid, it requiring 186 seconds to clean 100 square feet of blackboard area. By the back-and-forth method of procedure, the stick, towel, and water required 234 seconds to clean 100 square feet, the sponge 395 seconds, the towel with one hand, 339 seconds, the kerosene cloth 323 seconds.<sup>1</sup>

Use of the sponge must be eliminated because it is impossible to avoid streaks with it. Of the four methods giving good results, either the towel and water, using both hands, or the stick, towel and water are to be preferred. The former seems to be more rapid when used by the back-and-forth method, probably due to the fact that covering the blackboard two times by this method will clean and dry it, while with the latter, it must be covered three times, the reason for which will be explained in the next section.

*Methods of Procedure:* Three methods of procedure have been considered: (1) The up-and-down method in which the janitor cleans the blackboard from top to bottom as he progresses, (2) the back-and-forth method, in which the janitor cleans the blackboard from one end to the other, walking back and forth, (3) the circular method in which the janitor takes a circular sweep with his arm, washing the blackboard with irregular circular movements. The last method of procedure can be used only with the one-hand methods. It proved to be very slow. Comparing the up-and-down method with the back-and-forth method we find a small saving in time for the former when the stick, towel, and water are used and, for the latter when the towel with both hands is used. The most rapid means found for washing blackboards proved to be the use of the towel, folded to six thicknesses, using both hands, one above the other, and progressing back and forth along the blackboard from end to end. The use of the stick and towel by the up-and-down method was second in rapidity. The former required covering the blackboard but two times, once for washing and once for drying. The latter required washing all space twice for cleaning and once for drying. The former will clean the board with one washing because the hands are not as inflexible as a stick and fit themselves easily to the unevenness of the blackboard while the latter is rigid and leaves some space if washed but once. In either case, the towel must be rinsed and wrung as dry as possible for use in the drying process, while it should not be wrung too dry for the washing process.

In summary, then, the sponge is eliminated because it accomplished poor results and is slow; and the kerosene cloth and wet cloth used with one hand are eliminated because they are slow. The circular motion is eliminated because it is not applicable to the appliances that

<sup>1</sup>For complete table, see Reeves, Charles E., *An Analysis of Janitor Service in Elementary Schools*, Contributions to Education, No. 167, Teachers College, Columbia University, New York City.



are rapid. The appliance, stick-and-towel, seems to be slightly more rapid by the up-and-down method, and the towel used with both hands, is most rapid when used by the back-and-forth method. The most rapid appliance and method of procedure seems to be use of the towel, folded, pressed to and moved along the blackboard with both hands, one above the other, by the back-and-forth method of procedure. In any case, the board must be wiped with a cloth well wrung out by the same method and the towel must be kept free from chalk dust or the work will not be satisfactory.

#### ERASER CLEANING

The chief difficulty in the work of eraser cleaning is that janitors do not sufficiently clean erasers if they clean them at all. In seven of the eighteen schools observed, janitors never clean them. In most of the others, erasers were only partially cleaned. To clean erasers well without the best equipment is a hard job and requires much time and patience. Some chalk dust may be eliminated from erasers if a screen-work is placed across the chalk trays, upon which erasers may rest. This will also assist the janitor in making it easier to pick up erasers and pieces of chalk.

*Frequency of Cleaning Erasers:* In eleven rules and regulations it is required that janitors clean erasers weekly; in three, daily; and in six, "as often as necessary". In four of the schools studied, janitors clean erasers daily; in seven, weekly, and in seven, never. In schools where janitors never clean erasers the condition of erasers was always bad. The same reasons for the performance of this work by janitors apply as was stated above for the cleaning of blackboards.

To clean erasers weekly is not sufficiently frequent if they are to be kept in good condition, while if they are thoroughly cleaned so that practically no chalk dust remains in them, there seems to be no necessity for cleaning them every day. But if the dust on the outside of the felt strips is merely brushed off without thorough cleaning, then to perform this work daily will not keep them in good condition for use.

The required frequency will depend first, upon the degree of cleanliness secured, and second, upon the amount of usage, which will vary with the number of erasers per classroom and the habits of teachers in having classes use blackboards.

For the ordinary elementary school classroom, using at least a dozen erasers, the janitor should plan to clean them thoroughly at least two times per week. This can be done during school hours, when the janitor is not crowded with work, if he is provided with two sets of erasers, as was the case in most of the schools observed.

*Methods of Cleaning Erasers:* In the schools studied erasers were cleaned in one school by the central vacuum cleaning system; in six schools they were beat together; in four schools a stiff bristle scrubbing brush was used. The school using the first method was the only one where the work was satisfactory. In the others the work was hard and disagreeable, time-consuming, and the results poor.

By the two latter methods janitors usually cleaned erasers out-of-doors in all kinds of weather. This takes the chalk dust out of the building. One janitor cleaned erasers so the dust would go up the ventilating flue, another took them to the fire escape landing on each floor, while a third took them to the furnace room to clean them, first raising all the windows. In any case, except where cleaned by vacuum, janitors should have two sets of erasers so this work may be performed during school hours when the janitor has sufficient time.

Cleaning of erasers by a number of janitors

was observed for effectiveness of results and time required. The work accomplished by the central vacuum cleaner was far superior to that secured by either of the other methods. The average time required by vacuum was 4.2 seconds per eraser; by the method of beating them together, 40.6 seconds per eraser; by the brush, 23 seconds per eraser. The time for gathering and replacing them was not deducted in the above observations.

Experiments under controlled conditions were then conducted, using the three methods for the cleaning of erasers. Grades were assigned on a 5-point basis taking the following as criteria for their assignment: (1) The amount of chalk dust that leaves erasers when they are struck together, (2) the amount of chalk dust left on a board when an eraser is struck against it, (3) the amount of chalk dust that is seen between the strips when they are pulled apart. In securing the data for this work, erasers were all gathered and piled in a position, so that the time required by the various methods would not include other than the work of cleaning. All erasers had been cleaned 24 hours previously by the method used for each in the experiment so the results would show the removal of the dust accumulation for one day's usage. The results were as follows:

By central vacuum cleaner, average, 93 erasers in five minutes; Grade 1, "excellent".

By beating erasers together, average, 8 erasers in five minutes; Grade 3, "fair".

By use of dry scrubbing brush, average, 8 erasers in five minutes; Grade 5, "very poor".

To clean 100 erasers it required an average of 308 seconds by means of the central vacuum cleaner, 3,760 seconds by means of the method of beating two erasers together, and 3,790 seconds by means of the dry stiff scrubbing brush.

It required nearly twelve times as long to clean 100 erasers by beating two erasers together and by means of the dry scrubbing brush as was required by means of the central vacuum cleaner. In other words, nearly twelve times as many erasers could be cleaned in the same time by the last method as by either of the others. Furthermore, results secured by use of the central vacuum cleaner were far better than those secured by either of the other methods. Where erasers were cleaned by vacuum there was practically no chalk dust left in them. No dust was observed to leave them when they were struck together or when they were struck against a board, and when pieces of felt were pulled apart practically no chalk dust was observed. The grade was "excellent". With the method of striking erasers together, the results graded "fair". It was impossible to make erasers perfectly clean by this method. The results of using the brush received a grade of "very poor", practically no dust being removed. The brush made the erasers present a bright, clean appearance, but this was immediately undone when two of them were struck together or when one was struck against a board. Pulling apart the strips of felt revealed the fact that the brush took practically no dust from between them, and an eraser "cleaned" in this manner soon became as dirty as ever.

Cleaning erasers by means of the vacuum produced far better results if they were pulled across the inlet valve four or five times than if they were brushed 75 times or until further brushing had no effect, or than if they were struck together 150 to 200 times, or until further striking together produced little or no effect.

It was discovered that when beating them together, more dust could be removed if they were beat partially from the side rather than straight together, because in this way the dirt became loosened and the strips spread apart so the dust could escape. Striking erasers together in this manner is far preferable to use

of the brush which only brightens the outside of the eraser and does not eliminate the dust lodged between the strips of felt.

Because of the claim of some janitors that the vacuum was hard on erasers and pulled the felt loose, data were obtained for the number of erasers used in each building for three years. The results showed that the building where the vacuum was used had required fewer erasers per pupil during the three-year period than any other school in the city, in some cases it had required less than half as many. The vacuum cleaner may have the effect of loosening the felt strips, but pulling the eraser across the vacuum valve a few times is probably less hard on an eraser than brushing it 75 times or striking two erasers together 150 times.

Of the three methods used, the vacuum is recommended as far superior both in quality of results obtained and in time required for cleaning erasers. If the vacuum is not available, beating is recommended as being as rapid as the brush and far more effective. Brushing erasers is of practically no value, because as soon as they are used, the old dust left in them comes to the surface and they are as dirty as before.

#### OTHER CLEANING

*Cleaning Chalk Trays:* Twelve rules and regulations require that chalk trays shall be cleaned daily, eleven that they shall be cleaned weekly, and eight others "as often as necessary". In practice, where the work was performed at all, it was done daily. There seems to be as much reason that chalk trays should be cleaned daily as that rooms should be swept daily. The screen-work over the trays is excellent for preventing the stirring up of chalk dust and for assisting the janitor in picking up erasers and pieces of chalk when he clears the tray preparatory to cleaning it.

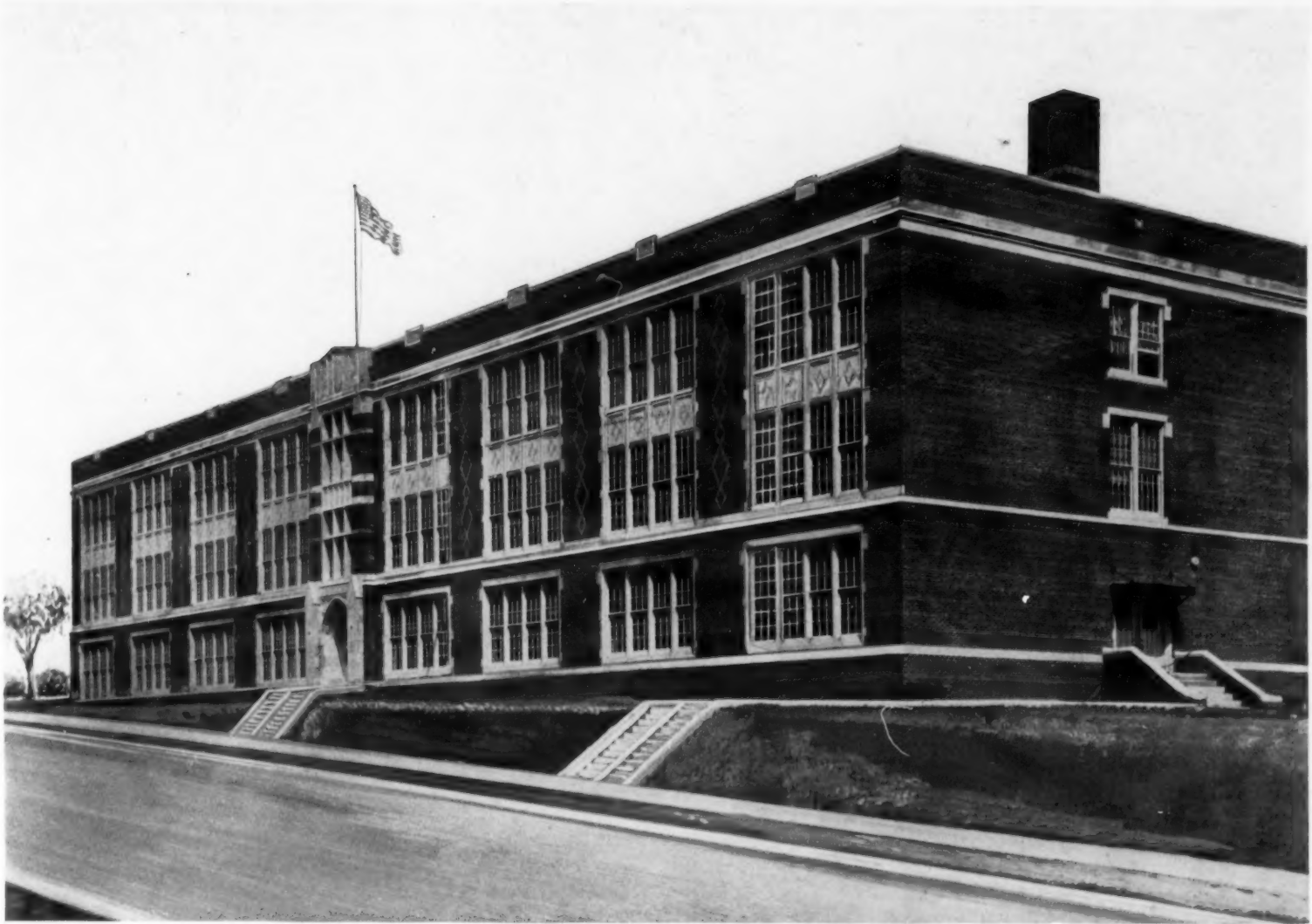
Janitors usually use a dampened cloth for cleaning chalk trays. Some use a sponge. One janitor used a kerosene cloth after the wet sponge. This is the best of the methods observed, because it removes the wet smears of chalk that the wet cloth or sponge will leave in the tray. If a sponge is used it must be frequently rinsed and squeezed dry to be effective. It is recommended that the kerosene cloth be used as the final appliance.

*Polishing Metal Fixtures:* The polishing of brass and other metal fixtures is an important job. In ten of the eighteen schools observed, metal fixtures, such as door knobs, handles and plates, brass sheets to protect the bottoms of doors, panic bolts, brass electric switch plates, hinges, brass handles for raising windows, faucets, brass pipes in toilet rooms, etc., were usually polished weekly. Brass should be polished often rather than left until it is tarnished, for then it will be difficult to polish. It is well to polish brass weekly. However, it is usually considered to be a job which can be dispensed with in case of the entrance of special work such as emergency repairing or shoveling snow. Practically all of this work can be performed during school hours, since most of it is in corridors, toilet rooms, or on doors opening into corridors. It may be performed during odd hours while school is in session and when the janitor has no other work pressing for attention. By its very nature it is an odd-time job. The time required to polish each piece is short and there is little preparation for the work. It is a job at which the time for its completion is never pressing and can be picked up, performed for a short time and dropped with very little loss of time and it is a job which makes no noise if performed during school hours.

In one school there were 200 doors with 400 door plates, not to mention other brass. The average time required to polish a plate 3"x12" was 1½ minutes. The requirement would, therefore, be ten hours for polishing brass door

(Continued on Page 129)





JUNIOR HIGH SCHOOL, PONTIAC, MICH.

Malcomson &amp; Higginbotham, Architects, Detroit, Mich.

## The Pontiac Junior High School

James H. Harris, Superintendent of Schools, Pontiac, Mich.

The first step in the construction of the Eastern Junior High School at Pontiac, Mich., was taken in November, 1923, with the approval of bonds amounting to \$750,000. The board of education immediately awarded the sale of the bonds to a banking concern and proceeded with the selection of an architectural firm to prepare the preliminary plans for the structure.

In January, 1924, the board considered a number of sites which resulted in the selection of the present site at the corner of two city streets. In April, plans for the building were approved by the board, and in May bids were received for the construction work.

The building is of brick-and-tile construction, is entirely fireproof, and contains a minimum of ornamentation. The building contains three floors, is 229 feet in length and has a width of 187 feet at its widest point. The first floor contains four classrooms, an auditorium-gymnasium, two shops, a principal's office, a medical inspection room, a mechanical drawing room, and showers, lockers, and toilets for boys and girls.

The auditorium-gymnasium is entered from and is a part of the first floor, the entrance being located directly across the corridor from the main floor. Special gates are provided, making it possible to isolate the school building entirely from the auditorium and gymnasium. The auditorium has a seating capacity of 421 on the main floor and 162 in the balcony, making a total capacity of 583.

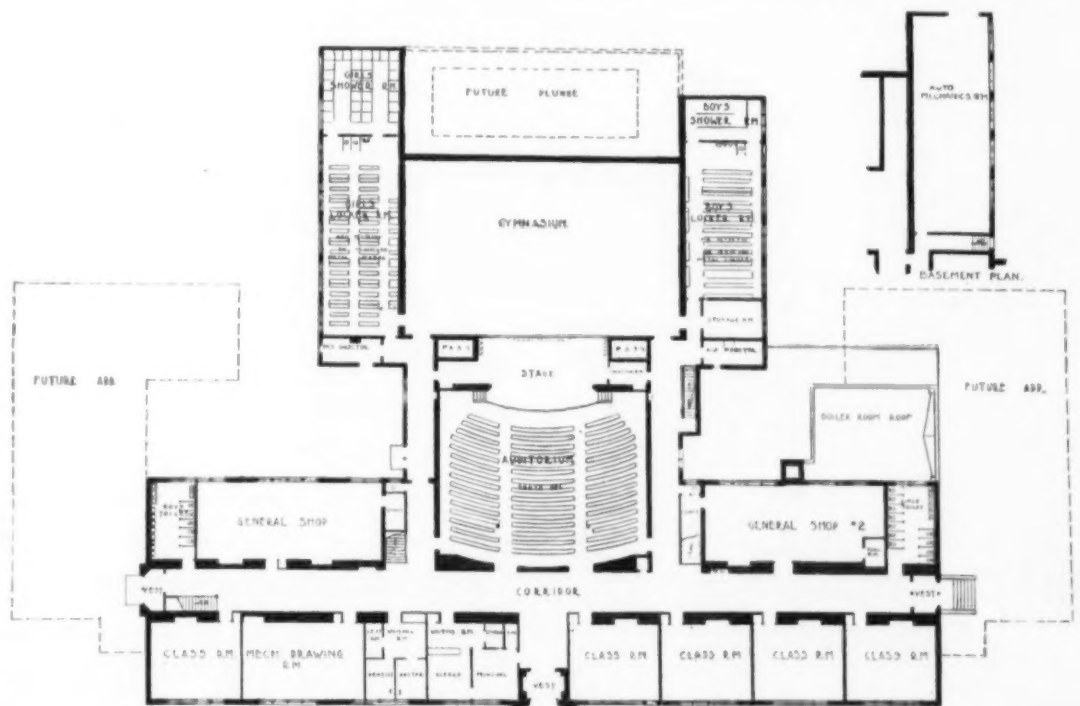
The gymnasium is in the rear of the auditorium and is simply an extension of its stage. It measures 80 by 50 feet, and its roof is amply high for games, etc. The office of the physical director, as well as the showers, are approached

through the corridors on either side of the auditorium and gymnasium.

The second floor contains eight classrooms, the upper part of the gymnasium, a commercial department, a library, a storage room, and a toilet room. The library reading room has at one end a librarian's office and a work room. All classrooms are planned to accommodate 35 pupils each.

On the third floor are found two classrooms, a music room, lunch and cooking rooms, an art room, a waiting room, two science rooms, and a toilet room.

All floors are linoleum, laid on a concrete base. The heating and ventilating system is the latest development of the architects and engineers of the structure, working jointly to produce a system for reducing the initial cost



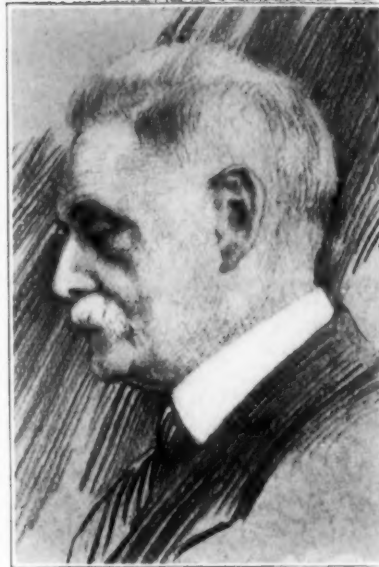
FIRST FLOOR PLAN, JUNIOR HIGH SCHOOL, PONTIAC, MICH.  
Malcomson & Higginbotham, Architects, Detroit, Mich.



JAMES H. HARRIS,  
Superintendent of Schools,  
Pontiac, Mich.



WILLIS M. BREWER,  
President of the Board of Education,  
Pontiac, Mich.



W. G. MALCOMSON,  
Architect,  
Detroit, Mich.

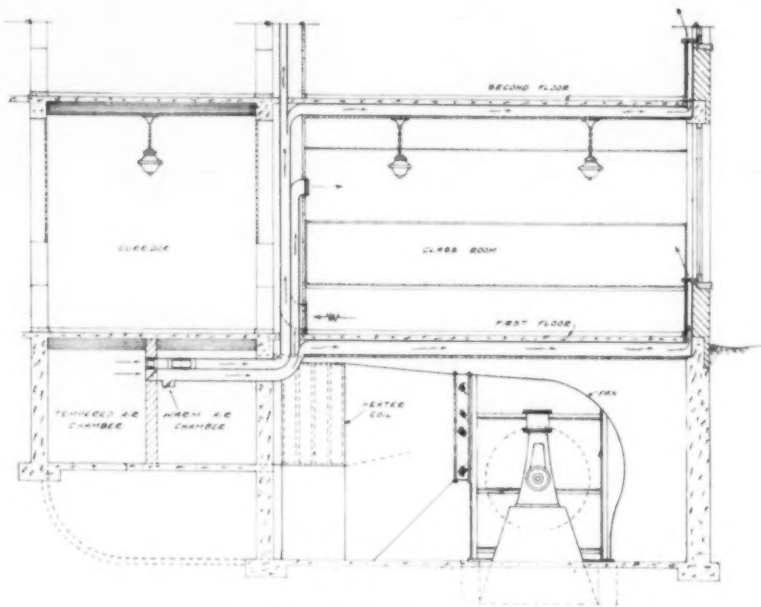
to a minimum, without sacrificing the efficiency in heating and ventilating required in a modern school. It is heated by a special-blast system of warm air heating, which is designed to do everything that the best split system will do at a very much lower initial cost, and with much better efficiency than the ordinary split system. The warm air is delivered to each room partly through diffusers, and partly through a small slit or opening in the window sill running the entire length of the room. About 80 per cent of the air is delivered from the wall diffusers and about 20 per cent through the window sill. The floor ducts are simply a part of the floor construction, without the use of any sheet metal. The air chamber under the window sills extends the full length of the windows and is so formed that the interior wall line remains unbroken, avoiding any projection to reduce the outside aisle space. No pupils sit next to the radiators as in the case of a split system, and the temperature and air movement are uniform throughout the room.

The building contains accommodations for 1,000 pupils and cost a total of \$485,000, including site and equipment. It was planned and erected under the supervision of Architects Malcomson & Higginbotham, of Detroit, Mich. The cost of the building alone, \$308,377; cost of the heating and ventilating, \$99,000; cost of the electrical work, \$18,505; cost of the site, \$50,000; cost of the equipment, \$32,841. The

per pupil cost, based on the total, is approximately \$570.

The building was dedicated with appropriate ceremonies on September 11th, and represents the inauguration of a full-fledged junior high school administration, covering the seventh,

eighth and ninth grades, housed in their own separate building. It stands on a site of five acres, with ample provision given to outdoor activities. There is a fine football field, with concrete bleachers, a baseball field, tennis courts, and a handball court.

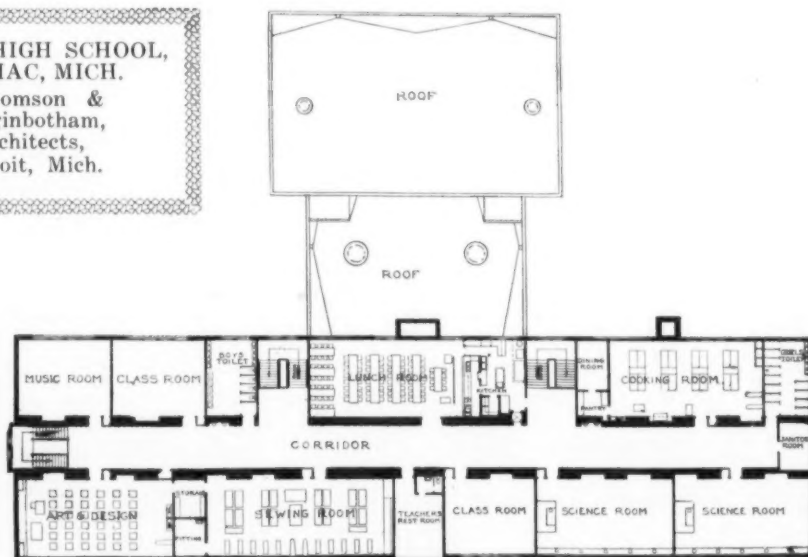


HEATING AND VENTILATING PLAN.



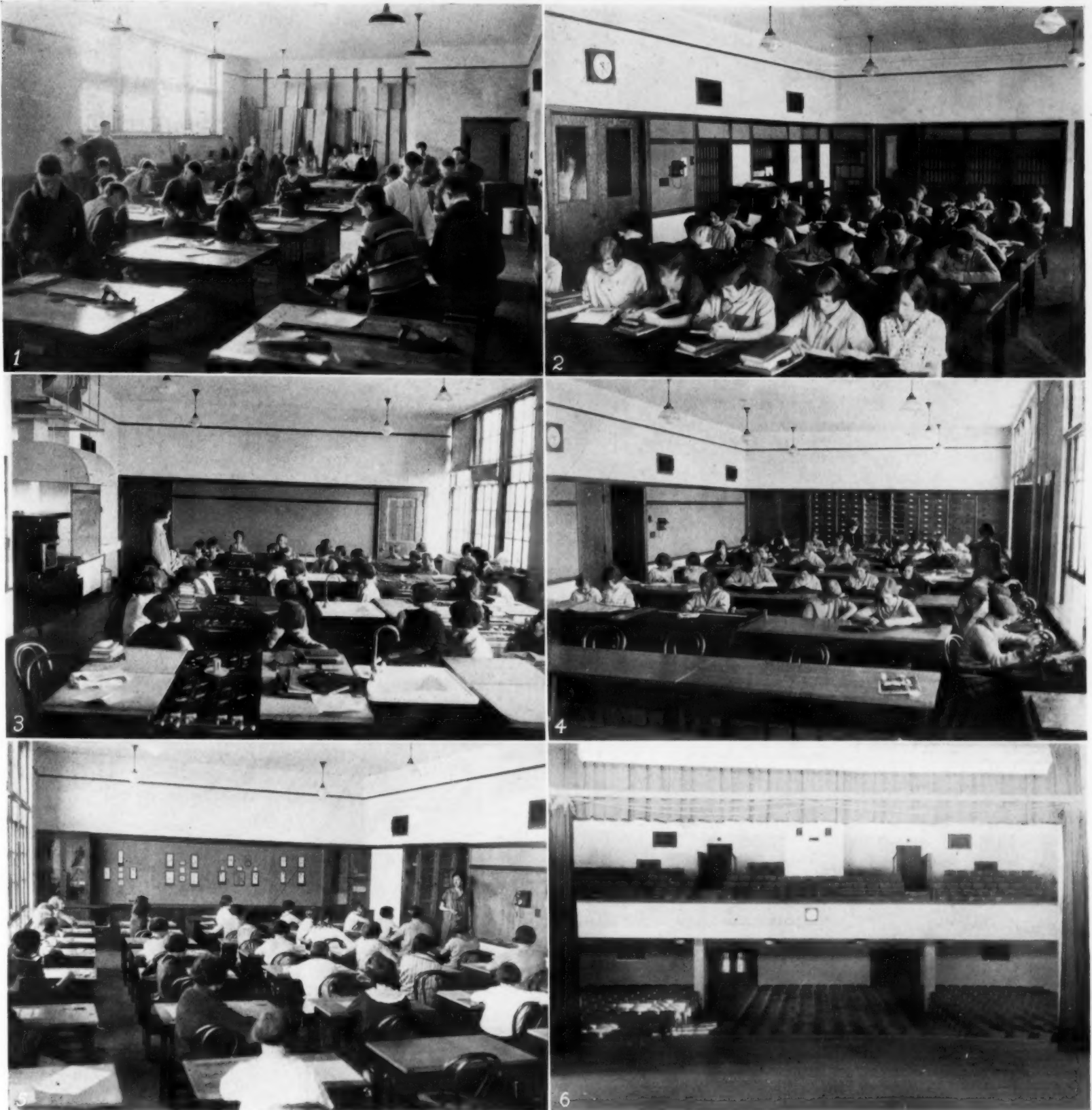
SECOND FLOOR PLAN.

JUNIOR HIGH SCHOOL,  
PONTIAC, MICH.  
Malcomson &  
Higginbotham,  
Architects,  
Detroit, Mich.



THIRD FLOOR PLAN.





INTERIOR VIEWS OF THE JUNIOR HIGH SCHOOL, PONTIAC, MICH.

1. Typical Woodworking Room; 2. The Library; 3. The Cooking Room; 4. The Sewing Room; 5. The Art Room; 6. The Auditorium.

**RECOMMENDATIONS ON JANITORIAL SERVICE**

The state department of education of Massachusetts has made a study of janitorial service through a body known as the committee on custodial care of school property, consisting of Superintendents William C. McGinnis of Revere, Chairman; Frank A. Scott, Belmont; John D. Whittier, Essex; Drs. Mary Lakeman and Frederica Moore, state health department; Arthur B. Lord and Burr F. Jones, state department of education. The recommendation reads as follows:

1. The janitor should be nominated by the superintendent of schools.
2. He should be held directly responsible to the principal of the school, subject to the general oversight and final authority of the superintendent and school committee.
3. The janitor should be dismissed by the school committee on the recommendation of the superintendent of schools. The superintendent should have authority to suspend a janitor pending a meeting of the school committee.

4. Owing to wide variations in living costs, janitors' salaries differ greatly in different communities. This Committee can set up no universal salary standards. Every community should feel under obligation to pay salaries sufficient to secure and retain men suitable for janitorial positions. The importance of the position should be recognized. The janitor safeguards public property. This often involves much broad and technical knowledge along mechanical lines. He sets housekeeping standards. He should be a man of good moral influence. He has a large control over the health condition of the pupils and teachers. He is an important factor in the matter of fire hazards and safety.

5. The Committee would recommend that cities and large towns not now granting pensions to janitors should give consideration to the plan set forth in Chapter 32 of the General Laws.

6. The full-time janitor should ordinarily be engaged for 12 months and allowed two weeks vacation with pay.

7. A half-day of work on Saturday should be the standard.

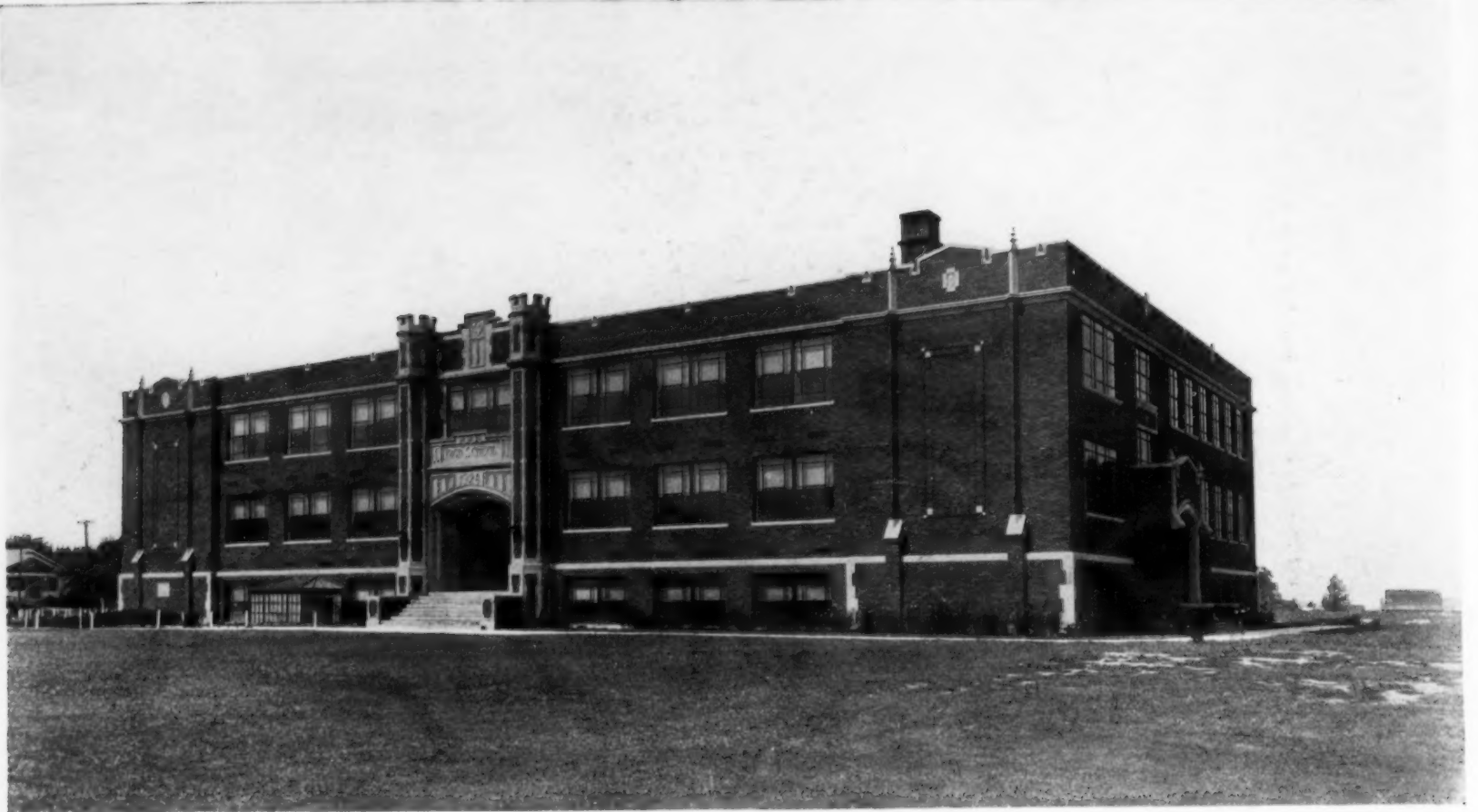
8. The janitor should if possible have a recess of one hour at noon.

9. A supervising janitor and a general utility man are coming into favor. The former may do much as a supervisor and trainer of janitors and as agent to take care of repairs and supplies. The latter may often save for the community the equivalent of his salary by taking care of painting and repair jobs too extensive for the janitor to do, but not sufficiently large to call for a contractor.

10. Every municipality should have regulations governing the work of janitors.

11. Ordinarily only men with experience in and knowledge of janitorial work should be engaged.

12. Training of janitors in service should be given if possible. This may be done by the supervising janitor or experts, by the State Course, or through regular meetings of janitors. In cities and large towns regular meetings for janitors are recommended.



HIGH SCHOOL, SULLIVAN, IND.

John B. Bayard, Architect, Vincennes, Ind.

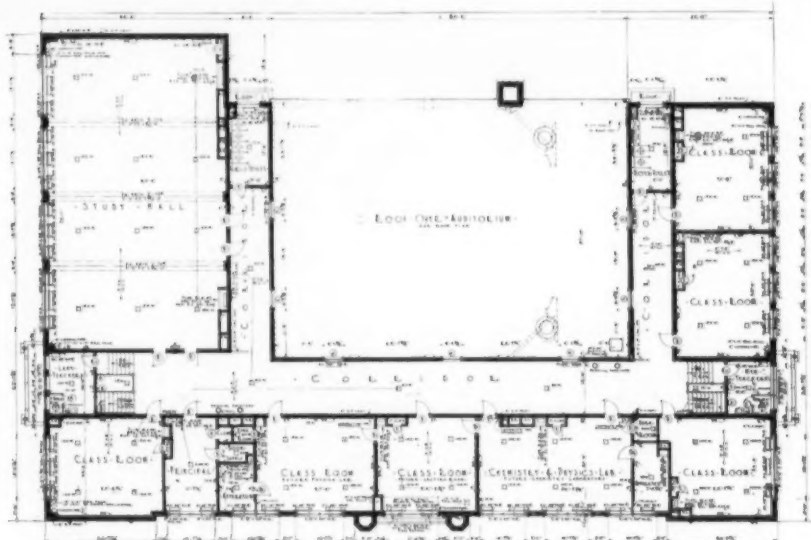
**THE SULLIVAN HIGH SCHOOL, SULLIVAN, IND.**

A. D. Montgomery, Superintendent of Schools.

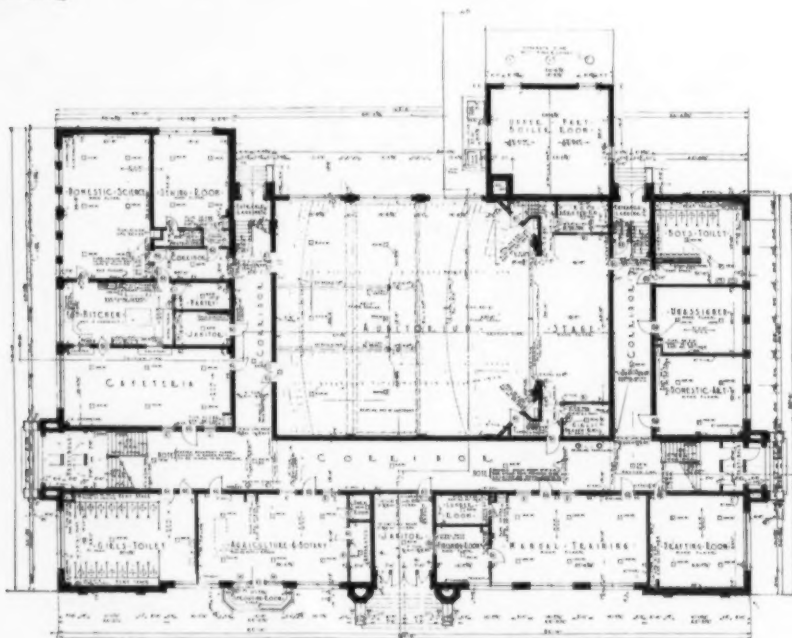
The high school at Sullivan, Indiana, was erected from carefully prepared plans and after a study of the school population and the future trend of the population. In working out the project, the architects took into consideration the factors of economy, simplicity, and adaptation to the present and future school needs of the community.

The high school occupies a site of seven and one-half acres and faces the Dixie Bee. It is located at a considerable distance from the street frontage, leaving a large tract for football, baseball and track at the rear; on the north there is ample space for tennis courts.

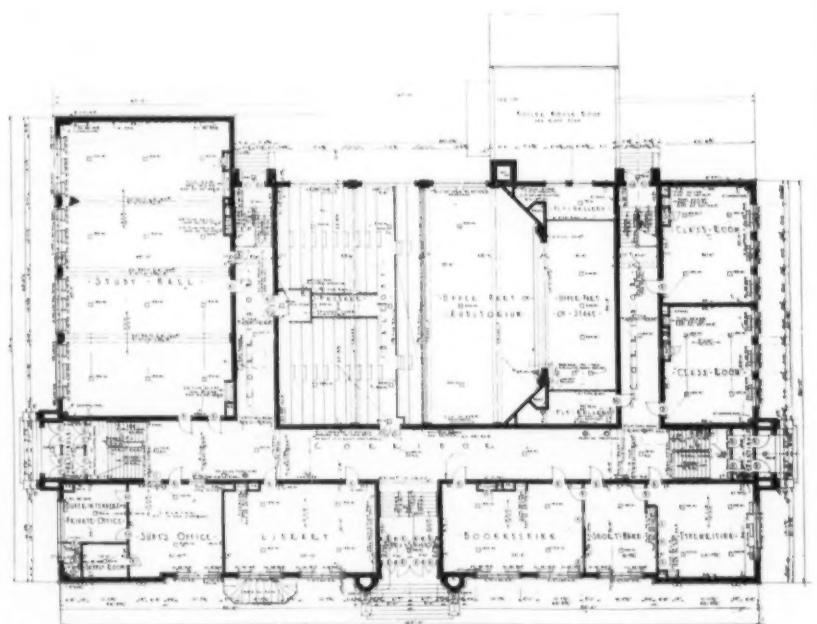
The exterior of the building is in the Gothic style, in mingled shades of red-face brick of rough texture, with trimmings of Bedford stone. The splendid mingling of architecture and setting are such as to produce a most beautiful building.



SECOND FLOOR PLAN



BASEMENT PLAN



FIRST FLOOR PLAN

FLOOR PLANS OF THE HIGH SCHOOL, SULLIVAN, IND. John B. Bayard, Architect, Vincennes, Ind.





UNION HIGH SCHOOL, KELSEYVILLE, CALIF.

W. H. Weeks, Architect, San Francisco, Calif.

The building is 165 feet 8 inches long and 110 feet 10 inches wide and is so planned that it may be enlarged at any time without injury to the architectural beauty of the structure. The basement is three and one-half feet below the level of the ground, making the classrooms, manual training and domestic science rooms as light as any on the floors above. On this floor are the domestic science department, a cafeteria, manual training and mechanical drawing rooms, classrooms, toilets, showers, store rooms, and the main floor of the auditorium. There is also a botany department, off of which is a sprouting room.

On the first floor are located the superintendent's office, with a study hall on the opposite side. On this floor also are the library seating fifty persons, the bookkeeping department of three rooms, and the entrance to the auditorium balcony which seats 290 persons. The auditorium is simple in design; the walls are beautifully tinted and attractive chandeliers add to its beauty. The acoustical treatment is excellent in character. The stage of the auditorium is unique and is well equipped with stage scenery and equipment.

On the second floor are the principal's office, a study hall, four classrooms, the physics and chemistry departments, and a lecture room. At each end of the corridor are offices, one for the dean of girls and one for the newspaper office. Toilets for boys and girls complete the facilities on this floor.

The construction of the building is entirely fireproof, with brick walls, Bedford trimmings, concrete floors and steps, and steel stairways. Classrooms have wood floors.

The manual training department is equipped with a large variety of benches, lathes and other woodworking machines, and the mechanical department has tables especially built for the purpose by the manual training classes.

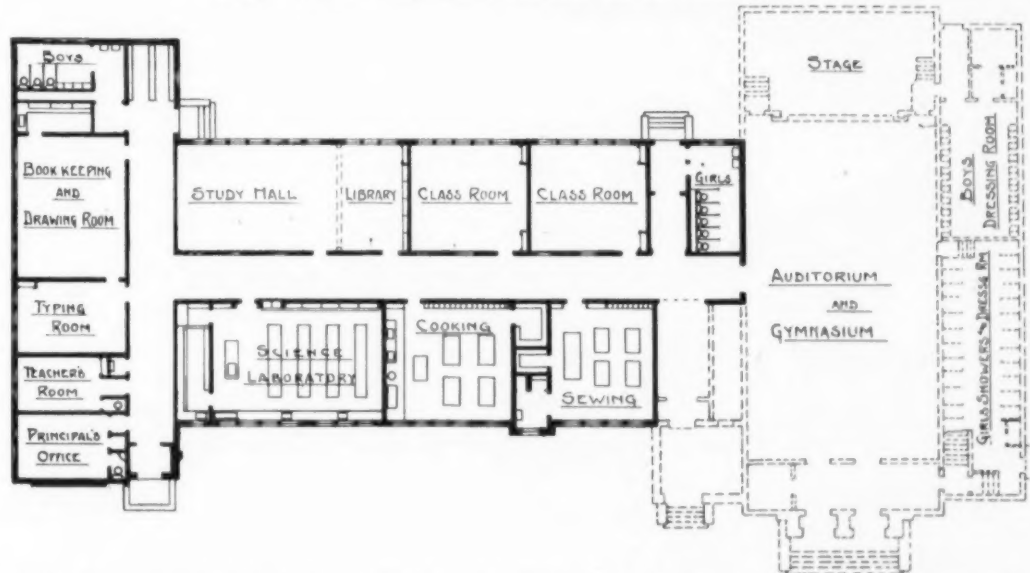
The building was planned and erected under the direction of John B. Bayard, architect, of Vincennes, Ind. It cost a total of \$155,429 for building and equipment. The cost of the building alone was \$104,466; the cost of the heating and plumbing was \$26,950; the cost of the lighting was \$2,970.

#### THE KELSEYVILLE HIGH SCHOOL

The Kelseyville Union High School recently completed in Lake County, California, is located in a rich pear-growing district, famous for its scenic beauty. It occupies a site in a



FRONT VIEW, UNION HIGH SCHOOL, KELSEYVILLE, CALIF.



FLOOR PLAN OF THE UNION HIGH SCHOOL, KELSEYVILLE, CALIF. W. H. Weeks, Architect, San Francisco.

grove of oaks and pines on a well-drained knoll, near one of the main highways, and has in addition a spacious athletic field.

In addition to two classrooms, the building contains an assembly hall, a science laboratory, a library, a commercial department, and cooking and sewing rooms. Plans have been made

for a combined gymnasium and auditorium to be added in the near future.

The building provides accommodations for an enrollment of 66 pupils who are almost entirely transported by busses.

Plans for the building were drawn by W. H. Weeks & Co., architects, San Francisco, and



HIGH SCHOOL, BATH, N. Y.

Palmer Rogers, Architect, New York, N. Y.

the construction work was done by the Cobby & Owsley Co., of the same city. The total cost of site and building was \$50,000, the building alone costing \$40,017.

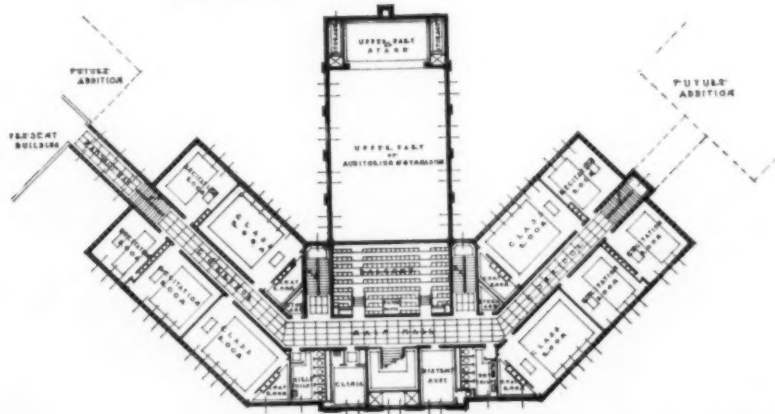
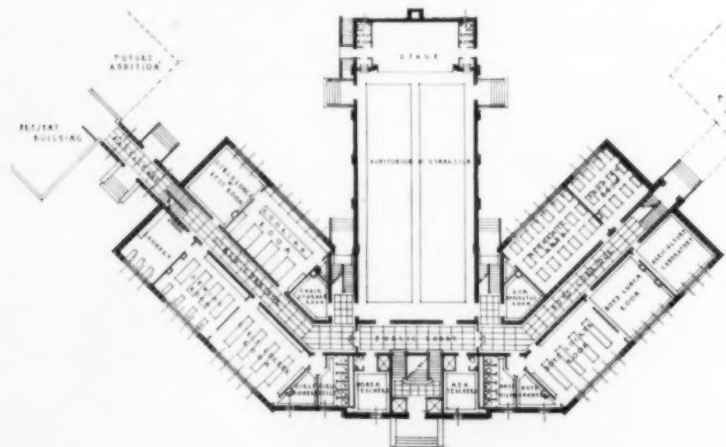
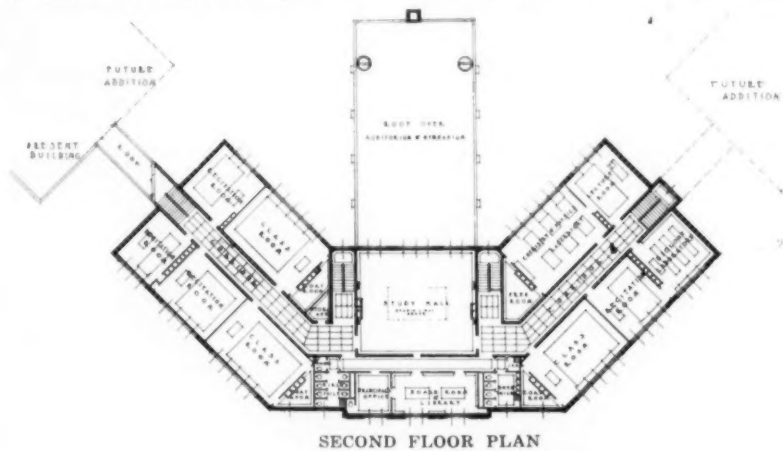
#### THE BATH HIGH SCHOOL

Before the War of Independence, the town of Bath, in the Colony of New York, had been founded by a land grant from England. Even in those early days, it was notable for its forward-looking citizens. In a time when posterity was little considered, an early city-father, named Williamson, gave a park restricted from any building, belonging to the city itself, and occupying the four corners of two intersecting stage roads. This gift, later named Washington Park, was the basis for a modern civic center, and launched the old Colonial town with a genuine community feeling which many more ambitious cities have had to cultivate deliberately.

On the square, which includes a quarter of the park, the nucleus of a school campus was given by Adam Haverling. It has been kept for this purpose ever since, and has known three stages—the early Academy, the Haverling

high school of 1867, and the new high school, of modern design and unique architecture, the outgrowth of conditions imposed by the plot taken from the natural site by the restricted park. The reservation for his lifetime by the owner of a building at one side of the old Haverling high school, further complicated the problem. The recent death of the former owner permitted the removal of the building.

The names of the two avenues—Washington and Liberty—commemorate the Revolution, while a soldiers' monument at their intersection recalls the Civil War. With the coming of the automobile, these highways, which had once been stage-coach roads, became important lanes of traffic. The new school, a World War memorial, dominates a neighborhood of historic



FLOOR PLANS, HIGH SCHOOL, BATH, N. Y. Palmer Rogers, Architect, New York, N. Y.





JUNIOR HIGH SCHOOL, FALMOUTH, MASS.

J. Robertson Ward, Architect, Boston, Mass.

importance, and one which is a natural civic center, for on surrounding corners are churches and public buildings, while the town hall is only a block away. It is, therefore, a fitting tribute not only to the high educational ideals of modern times, but to the Colonial forbears who first set the land aside as community property.

The plan of the school was evolved by the architects, Rogers and Smith, of New York City, after a competition in which it was found that all designs submitted encroached upon the

park or upon the life reservation. A new competition was held and the present plan, which overcame the limitations and fulfilled all needs, was selected. It is admirably adapted to the peculiar conditions involved, makes an asset of the drawbacks, and presents a building of real individuality.

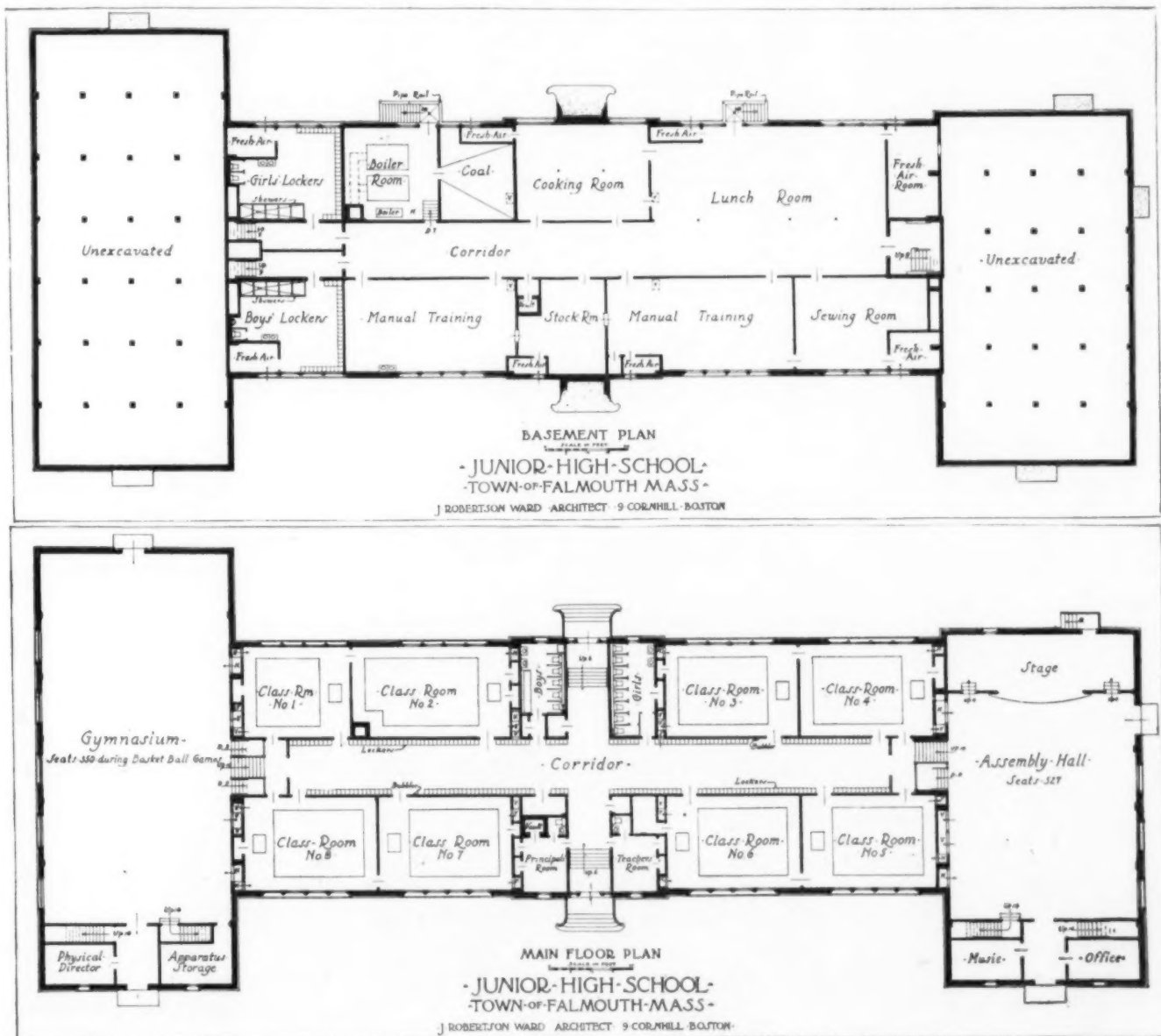
The school faces in three directions. The center is directly in line with the soldiers' monument, with a wing running parallel to each highway. Provision is made for connection to an existing building, and for sym-

(Concluded on Page 130)

### THE FALMOUTH JUNIOR HIGH SCHOOL

The Falmouth Junior High School at Falmouth, Massachusetts, was completed late in the spring of 1925. In addition to eight class-rooms, it contains an auditorium, a lunch room, a gymnasium, manual training and domestic science rooms, and cost a total of \$135,000.

The building was planned and erected under the direction of Mr. J. Robertson Ward, of Boston, Mass., and the construction work was done by the B. G. Norton Co., of Woods Hole.





CONGRESS STREET SCHOOL, STURGIS, MICH.

**THE STURGIS GRADE SCHOOL**

The new model grade school recently completed at Sturgis, Michigan, was built for a small community of 8,000 to 9,000 population. It is strictly modern and thoroughly fireproof.

The exterior construction of the building is of rough-finished red brick, with Chicago smooth bricks on the interior and tile for the cross walls, and Bedford limestone trimmings. The lower floor has a concrete base, with hard maple covering, while the upper floor has large steel joists and hard maple floors. The corridor is of cement, covered with oiled battleship

linoleum, and the stairway is of reinforced concrete, with carborundum safety treads.

The building is two stories in height and contains five classrooms and a large kindergarten accommodating forty pupils.

A boiler furnishes steam for heating the building and a thermostat has been installed to control the heat. Ventilation is furnished by means of a large motor-driven fan. Tilting windows are installed throughout the building.

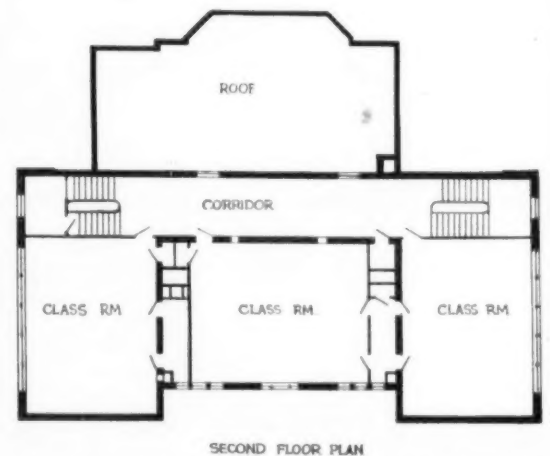
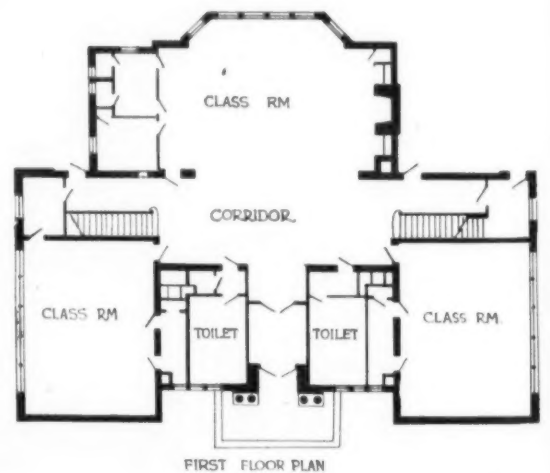
Plans for the building were prepared by Architects Brezen & Gay, of Lansing, Mich., and the construction work was done by the Krull & Bartles Co., contractors of Butler, Ind.

Brezen &amp; Gay, Architects, Lansing, Mich.

The building cost a total of \$58,849, which is distributed as follows: Cost of building, \$43,170; cost of heating and ventilating, \$6,452; cost of temperature regulation, \$1,275; cost of plumbing, \$2,890; cost of electrical work, \$1,275; cost of architectural service, \$1,810.



KINDERGARTEN, CONGRESS STREET SCHOOL, STURGIS, MICH.



CONGRESS STREET SCHOOL, STURGIS, MICH.



# Measuring the Ability of a Community to Finance a School Building Program

Ward G. Reeder, Ohio State University  
(Concluded from November)

## B. TAX RATES

It appears that Chillicothe is not taxing herself for schools quite as much as are her sister cities. Her present tax rate for schools is 9.21 mills per dollar while the median tax rate of the cities with which she is compared is 10.49 mills per dollar. She ranks 14th in size of tax rate for schools in the group of seventeen cities. These facts are brought out in Table VI.

In interpreting the tax rates, it should be kept in mind that property in some cities is probably assessed at a much higher percentage of its true value than in other communities. In such communities a low tax rate might mean as much sacrifice on the part of the people as a higher tax rate in the communities where property is assessed at only a small percentage of its true value.

TABLE VI.—TAX RATES IN MILLS PER DOLLAR FOR SCHOOLS, 1924-25\*

City	Tax Rate	Rank
Martins Ferry	14.65†	1
Bucyrus	14.50†	2
Bellaire	13.60	3
Ironton	13.13	4
Kenmore	12.25	5
Barberton	11.75	6
Cuyahoga Falls	11.31	7
Niles	10.46†	8
New Philadelphia	10.49†	9
East Youngstown	10.39	10
Cambridge	10.12	11
Piqua	9.43	12
Massillon	9.25	13
<b>CHILLICOTHE</b>	9.21	14
Coshocton	9.05†	15
Marietta	8.45	16
Fremont	7.70†	17
Median	10.49	

Chillicothe's tax rate for all municipal purposes is three mills less than that of the typical Ohio city. She has a tax rate for all purposes of twenty mills per dollar while the median city has a tax rate for all purposes of 21.70 mills per dollar. She ranks 13th in the group of sixteen cities. The tax rates for all purposes are shown in Table VII.

TABLE VII.—TAX RATES FOR ALL PURPOSES IN MILLS PER DOLLAR, 1924-25\*

City	Tax Rate	Rank
Bellaire	26.00	1.5
Martins Ferry	26.00†	1.5
Ironton	25.20	3.5
Bucyrus	25.20†	3.5
Barberton	23.60	5.5
Cambridge	23.60	5.5
Piqua	23.40	7
Cuyahoga Falls	22.00	8
New Philadelphia	21.40†	9
Niles	20.80†	10
East Youngstown	20.40	11
Kenmore	20.34†	12
<b>CHILLICOTHE</b>	20.00	13
Massillon	19.40	14
Marietta	18.90	15
Fremont	16.60†	16
Median	21.70	

Chillicothe devotes a smaller percentage of her total taxes to schools than does the typical Ohio city. She devotes 46.1 per cent of her total tax rate to schools while the median Ohio city with which she is compared devotes 49.5 per cent of its total tax rate to schools. She ranks 14th in the group of sixteen cities. Thus, it appears that Chillicothe is supporting her schools, compared with other public endeavors, a little less well than is the typical Ohio city. The facts from which this conclusion is drawn are found in Table VIII.

## C. INDEBTEDNESS AND VALUE OF SCHOOL PLANT

Compared with her sister cities, Chillicothe is relatively free from debt. Her indebtedness for schools per \$1,000 of wealth is \$9.18. The median Ohio city, on the contrary, has \$26.16 of indebtedness for schools per \$1,000 of wealth. Chillicothe ranks 18th in the group of

TABLE VIII.—PER CENT THAT SCHOOL TAX RATE IS OF TOTAL TAX RATE, 1924-25.

City	School Tax Rate	Total Tax Rate	Per-Cent that Sch. Tax is of Total	Rank
Kenmore	12.25†	20.34†	60.0	1
Bucyrus	14.50†	25.20†	57.5	2
Martins Ferry	14.65†	26.00†	56.3	3
Bellaire	13.60	26.00	52.3	4
Ironton	13.13	25.20	52.1	5
Cuyahoga Falls	11.31	22.00	51.4	6
East Youngstown	10.39	20.40	50.9	7
Barberton	11.75	23.60	49.8	8
Niles	10.46†	20.80†	49.2	9
New Philadelphia	10.49†	21.40†	49.0	10
Massillon	9.25	19.40	47.7	11
Fremont	7.70†	16.60†	46.9	12
<b>CHILLICOTHE</b>	9.21	20.00	46.1	13
Marietta	8.45	18.90	44.7	14
Cambridge	10.12	23.60	42.9	15
Piqua	9.43	23.40	40.3	16
Median	11.24	21.70	49.5	

20 cities in indebtedness for schools per \$1,000 of wealth. On basis of indebtedness, therefore, compared with the other Ohio cities, she is in a very favorable condition to finance a building program. Indebtedness for schools per \$1,000 of wealth is shown in Table IX.

TABLE IX.—INDEBTEDNESS FOR SCHOOLS PER \$1,000 OF WEALTH, 1924-25.

City	Indebtedness per \$1,000 of Wealth	Rank
Kenmore	\$56.66	1
Ironton	42.86	2
Cleveland Heights	39.27	3
Cuyahoga Falls	37.89	4
Bellaire	37.53	5
Barberton	37.13	6
Martins Ferry	34.71	7
East Youngstown	30.71	8
Massillon	27.92	9
Piqua	26.85	10
Coshocton	25.47	11
Findlay	20.15	12
Fremont	20.13	13
Tiffin	19.56	14
Cambridge	19.23	15
Salem	16.67	16
Marietta	14.00	17
<b>CHILLICOTHE</b>	9.18	18
New Philadelphia	8.68	19
Lancaster	7.71	20
Median	\$26.16	

Not only is Chillicothe relatively free from debt for schools, but she is relatively free from debt for other municipal purposes as well. She has an indebtedness for municipal purposes other than schools per \$1,000 of wealth of \$15.79 while the median Ohio city has \$26.85 of indebtedness for municipal purposes other than schools per \$1,000 of wealth. Chillicothe ranks 13th in the group of 15 cities. These facts are brought out in Table X.

TABLE X.—INDEBTEDNESS FOR MUNICIPAL PURPOSES OTHER THAN SCHOOLS PER \$1,000 OF WEALTH, 1924-25.

City	Indebtedness per \$1,000 of Wealth	Rank
Ironton	\$71.43	1
Salem	46.67	2
Barberton	43.27	3
Findlay	37.75	4
Cambridge	36.15	5
Cuyahoga Falls	32.66	6
East Youngstown	30.77	7
Piqua	26.85	8
Fremont	23.35	9
New Philadelphia	22.54	10
Marietta	18.18	11
Massillon	17.48	12
<b>CHILLICOTHE</b>	15.79	13
Bellaire	11.24	14
Tiffin	10.99	15
Median	\$26.85	

On basis of indebtedness for all purposes per \$1,000 of wealth, Chillicothe is freer from debt than any of her sister cities. She has only about one-half as much debt as the median city. The median city has \$53.70 of indebtedness for all purposes per \$1,000 of wealth while Chillicothe has only \$24.97. These facts are brought out in Table XI.

Thirty-six and eight-tenths per cent of the total indebtedness of Chillicothe is for schools while the median Ohio city has a school indebtedness which is 46.2 per cent of the total indebtedness. Here again the ranking of Chillicothe is very favorable; it appears that the phy-

TABLE XI.—INDEBTEDNESS FOR ALL PURPOSES PER \$1,000 OF WEALTH, 1924-25.

City	Indebtedness per \$1,000 of Wealth	Rank
Ironton	\$114.29	1
Barberton	80.40	2
Cuyahoga Falls	70.55	3
Salem	63.34	4
East Youngstown	61.54	5
Findlay	57.90	6
Cambridge	55.38	7
Piqua	53.70	8
Bellaire	48.77	9
Massillon	45.40	10
Fremont	43.48	11
Marietta	32.18	12
New Philadelphia	31.22	13
Tiffin	30.55	14
<b>CHILLICOTHE</b>	24.97	15
Median	\$53.70	

sical needs of her schools have not been met as well comparatively as have the physical needs of other municipal functions. The facts for this comparison are shown in Table XII.

Each year, boards of education, when making their annual reports, are requested by the State Department of Education to estimate the value

TABLE XII.—PER CENT THAT SCHOOL INDEBTEDNESS PER \$1,000 OF WEALTH IS OF ALL INDEBTEDNESS PER \$1,000 OF WEALTH, 1924-25.

City	School Indebtedness per \$1,000 of Wealth	All Indebtedness per \$1,000 of Wealth	Per Cent that School Indebtedness is of Total Indebtedness	Rank
Bellaire	\$37.53	\$48.77	77.0	1
Tiffin	19.56	30.55	64.0	2
Massillon	27.92	45.40	61.5	3
Cuyahoga Falls	37.89	70.55	53.7	4
Piqua	26.85	53.70	50.0	5.5
E. Youngstown	30.77	61.54	50.0	5.5
Fremont	20.13	43.48	46.3	7
Barberton	37.13	80.40	46.2	8
Marietta	14.00	32.18	43.5	9
Ironton	42.86	114.29	37.5	10
<b>CHILLICOTHE</b>	9.18	24.97	36.8	11
Findlay	20.15	57.90	34.8	12
Cambridge	19.23	55.38	34.7	13
N. Philadelphia	8.68	31.22	27.8	14
Salem	16.67	63.34	26.3	15
Median	\$26.16	\$53.70	46.2	

of their school plants. Although these estimates may frequently be far from correct, they should, nevertheless, be of interest. The school plant of Chillicothe is valued at \$227 per pupil enrolled in public schools while the median Ohio city has a school plant which is valued at \$333 per pupil enrolled. Compared with her sister cities, Chillicothe has the cheapest school plant per pupil enrolled. These facts are shown in Table XIII.

TABLE XIII.—VALUE OF SCHOOL PLANT PER PUPIL ENROLLED IN PUBLIC SCHOOLS, 1924-25.

City	Value of Plant per Pupil Enrolled	Rank
Cleveland Heights	\$1,202	1
Lancaster	667	2
Kenmore	644	3
Massillon	622	4
Ironton	519	5
Piqua	463	6
East Youngstown	426	7
Bellaire	401	8
Cuyahoga Falls	396	9
Coshocton	333	10
Salem	332	11
Tiffin	325	12
Barberton	314	13
Cambridge	299	14
Fremont	268	15
New Philadelphia	266	16
Martins Ferry	236	17
Marietta	235	18
<b>CHILLICOTHE</b>	227	19
Median	\$ 333	

Chillicothe's indebtedness for schools is 27.9 per cent of the value of her school plant while the median Ohio city has an indebtedness for schools which is 52.4 per cent of the value of the school plant. Again, Chillicothe may be congratulated, because it is unfortunate when we find a school system with a debt as large or nearly as large as the value of its school plant. A school system is to be congratulated for keeping its assets much larger than its liabilities. The facts on which the conclusions of this paragraph are based may be found in Table XIV.

(Concluded on Page 126)

\*The tax rates were taken from the County Treasurers' tax notices.

†This rate is for 1923-24; that for 1924-25 was not available.

†This rate is for 1923-24; that for 1924-25 was not available.



## THE AMERICAN School Board Journal

WM. GEO. BRUCE }  
WM. C. BRUCE } Editors

### EDITORIAL

#### WHAT WINS A SCHOOL BOND ELECTION

One of the most hotly contested school bond fights ever waged in an American city came to a successful issue at Denver. The board of education of that city had entered upon a comprehensive school building program a few years ago, but found this year that it required another two million dollars to complete the program.

A leading newspaper charged the school authorities with extravagance and inaugurated a campaign against the proposed bond issue. It made in bold headlines the following contentions:

"Do you know that, as present constituted, the school board of Denver has more autocratic and tyrannical powers than any other school board that we know of in the United States?"

"They can burden us with such taxes and expenses for running our schools as pleases them. And we who pay the taxes haven't a single thing to say about it."

"The amount of bonds they can issue and the taxes they can assess against us is practically unlimited, and our one salvation is in refusing to vote the bonds that they are now constantly asking for."

"Every bond issued is a mortgage on all the property of every taxpayer in the city—goodness knows our taxes are high enough now. Practically one-half of all the taxes you pay are school taxes."

"We think the time to stop is now here. If it isn't here now, it will be here in a very short time, the way they are going—but that may be too late, the damage will already have been done, the money will already have been wasted, and we will have to pay to the last cent, principal and interest, because all of the property of Denver is mortgaged for this purpose."

A warfare of this character, extended over several weeks preceding the election, would seem most discouraging to the school interests. The voter who is confronted day after day with an argument designed to protect his pocketbook is likely to become converted.

But, the friends of the schools were not so easily discouraged. They instituted a counter-campaign and brought the whole issue clearly before the taxpaying public. Meetings were provided in schoolhouses and public halls. Capable speakers were on the scene.

The president of the board of education, the superintendent of schools, leading business and professional men, went before the public to defend the program of the school authorities. They discussed frankly every phase of the situation.

The result was that the bond issue was carried by a majority of over 5,000 votes. The Denver Journal said: "The voters exercised common sense and business judgment. It was not a case where bonds were asked for new schools, but to complete ones in process of erection and to provide funds for furnishing them."

It may here be argued that the board of education was not warranted in extending its building program beyond the money already voted, and that to enter into an obligation and then call for help is not the best way of doing

things. But, when the project has advanced to a point where abandonment means a loss, then common sense dictates that it must be completed.

The Denver experience, on the whole, teaches that the public will support the schools in every laudable and desirable departure. It also teaches that absolute frankness wins public confidence and popular support.

#### SELECTION AND PURCHASE OF SCHOOL SITES

Many of the ruptures which occur between school authorities and the public arise out of the selection of school sites. The board of education in the choosing of a site primarily considers accessibility, present or future, or both, and takes into account the general environment of a neighborhood, and last but not least, the item of cost.

Frequently the ideal location is already covered with pretentious structures rendering the purchase of the site too costly. Then, too, it happens that a piece of property, which has been in the market at a low figure, will take a sudden rise when it is made known that its purchase for school purposes is contemplated.

The difficulty in selecting sites for high schools has been accentuated by the fact that larger areas are now required in order to provide athletic fields. School authorities are frequently compelled to seek the uncovered sites in the outskirts of the town in order to secure the desired acreage. The element of accessibility is sometimes sacrificed in order to meet area requirements.

The sectional rivalry which at times is aroused to a high pitch may prove most embarrassing. The location of a stately high school in any section of the town will affect surrounding property values. The real estate man who has tracts of land in the vicinity is on the alert. He is never at a loss to point out the advantages of one site and the disadvantages of another.

Then, there is the parent side of the case. They seek the convenience of their children. They must not walk any distance to school. These should be conveniently accessible. Why pay taxes if you cannot have things as you want them?

Where a city school system is constantly growing, a timely anticipation of future needs may wisely be engaged in. A city in the middle West which is confronted with this problem says through its board of education that "School sites should be purchased while land values are low and before a district is developed. This necessitates the purchase by the cities of sites in the adjoining school districts, which school districts may already have a school site or may not approve of the city's site and may purchase one of their own, causing duplication and improper location insofar as a general plan of development is concerned, all of which eventually results in the abandonment of one of the sites, with resulting loss to the public."

A board of education made up of judicious and resolute men and women will approach the selection of a site with calm deliberation, weigh and measure thoroughly all the considerations involved, and then face protest and criticism unflinchingly. Usually with the passing of time the misunderstanding will clarify itself, and the action of the school authorities will, in the light of subsequent experience, find complete justification.

#### PROGRESS IN THE SCIENCE OF ACOUSTICS

Until a few years ago there were many assembly and meeting halls in the United States afflicted with bad acoustics. Architects had missed their guess as to the sound-carrying qualities of halls of certain size and form. Some of the most splendid halls were so defective that the human voice became unintelligible at

a distance of thirty feet. The echoes that played back and forth destroyed the very use for which the structure was created.

The experiments made in the direction of a remedy have been various, and sometimes unique. For a time, relief was sought in a series of wires strung along the ceiling. The results were not promising. Sometimes the reshaping of the halls was resorted to. But, apparently, no one knew exactly the action of sound waves and how to control them.

But, science at last came to the rescue. The fact that the acoustics in a crowded hall were better than in a hall meagerly filled, or vacant hall, gave the cue. It led to the thought of sound absorbents and the elimination of reverberations. If the garments worn by an audience absorb sound; why not have walls and ceilings perform the same service? Thus, scientists began to reduce sound to fixed units, and to devise absorbents to receive them.

The success which has attended these experiments is now beyond question. Many halls acoustically defective have been corrected. The walls and ceilings are panelled with absorbent materials, and sound is carried from the stage to the audience, without reverberation or echo.

In the larger halls of the country, even where defects have not existed, radio amplifiers have been installed. Their practicability has been demonstrated more specially where the voice of the speaker was not particularly strong or clear. They have proven most serviceable at conventions where a great variety of voices, both male and female, were heard.

On the whole, it is safe to say that the science of acoustics has advanced sufficiently to enable the correction of hall defects wherever it may be found. In fact, modern architecture will be sufficiently alert, to practice prevention rather than compel resort to cure, and to design halls and auditoriums in such manner, and provide such materials, as will insure perfection in acoustics.

#### THE QUESTION OF EXECUTIVE COMMITTEE SESSIONS

The question of secret school board sessions as against open sessions has frequently been discussed in these columns. It is well known that the American public frowns upon all secrecy of its public affairs and is always prone to suspicion when such information upon them is withheld.

Experience has taught that there are instances, however, in school administrative deliberation when executive board or committee sessions are not only excusable but highly desirable. When the morals of teachers and pupils are in question, publicity is liable to do great harm to the disciplinary wellbeing of the school constituency.

It has also been found that in the earlier deliberations on the choice of school sites, it is not wise to disclose the intention of the school authorities before definite options on land have been secured. When it becomes known that a given site is in contemplation of selection, the price for same is bound to go up, and an inquisitive public must pay the price.

The question of executive sessions has become an issue in St. Louis, Missouri. A local civic organization has insisted that the deliberations of the committee on school buildings of the board of education be thrown open to the public. The committee resists the change and submits its reasons therefor.

It contends that its function is to originate, devise, and inaugurate, and that its recommendations are not subject to public knowledge until they reach the board of education. "To throw our committee meetings open to the public," says the chairman, "would operate a change in that the deliberations of the officers and of the committees would be subjected to the in-



fluences from which they have hitherto been free."

In opposing open meetings, the committee further urges:

"The officers of the board in initiating or suggesting action along certain lines would be required to submit their recommendations in the presence of bodies of citizens by whom the motives, the purposes and the wisdom of such recommendations would be increasingly questioned, frequently, no doubt, in good spirit, but also at times under the stress of feeling in a spirit of hostility. The committees would cease to be deliberative bodies. Confidential exchange of opinion between them and the officers of the board would be impossible. In the absence of such exchange of opinion an intelligent and sympathetic consideration of policies and purposes could not be expected.

"Submission of recommendations in the presence of groups of citizens can only lessen the members' sense of personal responsibility, encourage proposals momentarily popular whether advantageous or not, and invest with undue influence bodies devoid of legal responsibility that assumed the prerogative of shaping the policies of the schools. A serious impediment will be erected to the continuance of the good work that the officers have done in the past and are doing now."

The position taken here is wholly tenable. The committee deals with the question of prospective school sites, repairs and new buildings. The formative stages to a project may be hampered by the pressure of commercial interests, and premature publicity may eventually become an expensive privilege.

It becomes quite evident then that situations may arise where executive sessions are entirely in the interest of the school system. To insist upon open sessions here not only forms an expression of distrust, but may prove detrimental to the system.

After all the question of open closed sessions hinges upon the character of the men and women who constitute the board of education. There happens to be no general clamor for open meetings in St. Louis because that city has always maintained a high class board of education. That body enjoys the confidence of press and public because the schools are efficiently administered.

The conclusion on the broad question must be that situations may arise in the administration of any school system where premature publicity may do more harm than good. The public always has a right to know how its affairs are managed, but there are times and instances when the public ought not, in its own interest, demand or desire such publicity.

#### CONTRIBUTION OF THE AUTOMOBILE TO THE CAUSE OF EDUCATION

If the progress of popular education in the United States has reached a momentum never before attained, it is in large measure due to the fact that science and invention have given tremendous aid. The modern schoolhouse with its ingenious devices and installations making for safety, comfort and convenience, affording greater expedition in operation, give ample demonstration of that claim.

The automobile, however, as a vehicle of transportation has also become a decisive factor in the cause of popular education. Just as the aeroplane became a possibility through the invention of high power motors, so the consolidated school and rural school supervision reached their highest stage of efficiency through the same medium.

The writer recently visited a night trade school in an industrial center and found over two hundred cars belonging to the faculty and students parked about the neighborhood. It was found that the automobile enabled students who resided at a distance, and who otherwise could not attend, to avail themselves of the services of the trade school.

But, the school bus in the rural district tells even a more inspiring story. It gathers chil-

dren from a radius of twelve to fifteen miles and delivers them to a well organized, full grade school. The one-room country school, with its drawbacks and restrictions, is fast becoming obsolete. The rural school child is receiving all the advantages conferred upon a city child.

Another great advantage is derived in the field of rural school supervision. The county school superintendent who formerly found it physically impossible to cover his territory, especially if the same was large, is now able to render a ten-fold service in visiting the schools in his charge. This applies also to the supervisor of the city schools who aims to keep in frequent and intimate touch with the schools.

Thus, the motor vehicle has been the means, through the shortening of time and distance, to render a remarkable service to the cause of popular education. It makes the existing educational facilities accessible to a wider constituency and enables those in charge to administer them with greater thoroughness and efficiency.

#### THE EDUCATIONAL CARTOON AND ITS VALUE

The modern cartoon has not only become a feature of American periodical literature but has been developed to a degree where it must be recognized as a distinctive art. The ability to picture a situation so graphically that it will tell its story at a glance, is the trick of the cartoonist.

Years ago the editor of the SCHOOL BOARD JOURNAL conceived the idea that many of the foibles and errors in American educational life, as well as its virtues and advantages could lend themselves to cartoon expression, and thereby carry home a lesson with greater force than this could be accomplished with words. While the idea was acceptable, it remained after all for an artist to find an apt and lucid cartoon expression. When a cartoon must be accompanied with a lot of explanatory reading matter, it is certain that it has missed its point. It must tell the whole story at a glance.

The Harold Heaton cartoons which have appeared in this publication for several years have dealt with certain situations and conditions in the nation's school life. In nearly every instance, the artist has succeeded in picturing an abuse or a shortcoming with a startling clearness and pointed out the lesson. And in no instance has he resorted to the vulgar and ungraceful. His figures, whether they illustrated a goddess of education, a schoolmistress, or a board of education member, were always dignified and acceptable.

Occasionally some one would find fault with a cartoon, claiming that it demonstrated its point too sharply, or that one of its figures was not well drawn, but at the same time there came sufficient words of approval from others to testify to the acceptability of the effort.

The requests which have come from school authorities for reprints of certain cartoons give ample evidence of their popularity. The October cartoon, in which Uncle Sam reprimands the boy who breaks the schoolhouse windows in the evening while he has saluted the American flag in the morning, affords an instance in this direction. Over 33,000 reprints were requested by school officials for display on school bulletin boards. Nearly a thousand acknowledgments were received with the comment: "Fine", "splendid", "excellent", "good", "immense", etc., etc.

The experience gained leads us to the conclusion that there are many situations in the field of school administration which lend themselves to cartoon demonstration, but that the success of the same depends upon the aptness and clearness of expression that is accorded.

#### THE PERSONAL LIBERTY OF THE SCHOOL TEACHER

The school news which appears in the rural press, frequently tells of rules adopted by school boards which seek to regulate the conduct of school teachers outside of the schoolhouse. These rules have in past years restricted a variety of diversions and pleasures likely to be engaged in by teachers.

One school board forbids its teachers to attend dances and another forbids its male instructors using tobacco. Other rules concern themselves with the use of cosmetics, the length of skirts, and what not. Recently, a school board in the West, forbade high school teachers from strolling about with their male students. More recently, an Illinois school board decreed that the teachers must spend at least three week ends a month in town, in order to become a more intimate part of the social life of the community.

In the face of these regulations the teacher might well argue that she is hired to render service in the classroom and that beyond that service no school board has the moral right to dictate her conduct outside of the school. She may also contend that after having completed her work in the classroom, her time is her own and she may spend that time as she pleases.

There is one phase, however, which enters here; namely, that a teacher is a social factor outside of the specific service she renders to the school. The community may set certain standards in adult conduct designed, not only to elevate the moral life of its constituents, but also to set an example to the youth as well. In upholding such standards the school teacher becomes an important factor.

Thus, in the moral aspirations of the community the more outstanding figures must lend momentum and guidance. The teacher cannot escape this obligation. She may come as a stranger into a community to perform a specific duty and not meet with that sympathetic social touch which prompts her to conform with its ideals. Thus, if on the one hand, the teacher is asked to conform with the spirit of the community, it also follows that the community must not only receive her as a teacher but also as a social factor.

The school boards that resort to regulations governing the conduct of teachers outside of their schoolroom work, merely express the community conception of social conduct for the adult class and in its reaction upon the rising youth. The extent to which a teacher may, or may not, submit to school board regulations is a matter wholly within the province of the contracting parties.

Complaint is made by a Tacoma paper that the great Tacoma stadium is used so little for public spectacles. Interest on the part of public officials and civic bodies has lagged. The school board cannot, in the estimation of the local paper, be expected to interest itself in the matter, which is properly a task for other civic bodies.

We have always felt that the erection and maintenance of a great stadium is not properly within the scope and function of the school department of any city. It belongs more properly with some municipal department which has in charge the parks and other enterprises concerned with public recreation. The school board may well and should handle the playgrounds and social centers connected with school buildings, but here its undertakings may well stop.



### TEACHER LEAVE-OF-ABSENCE IN CANADA

The School Trustees' association of British Columbia, in convention assembled at Kamloops, recently devoted considerable discussion to teacher contracts and the leave-of-absence question. It was decreed that teachers shall give due notice, before the close of the school term, of any intention to resign. This means that they must give two months' notice if they desire to resign at mid-summer, and one month's notice if resignation is to take effect on the last day of December.

The association disallowed a resolution to the effect that teachers be given three days' leave at full pay in case of bereavement in their families, and leave at full pay on days of unavoidable quarantine. According to the public school act of British Columbia, the teachers are allowed 10 teaching days' sick leave on full pay in each school year, and in the case of any teacher who does not use the full 10 days' leave in any year, to treat the allowance of that teacher as cumulative to the extent of fifty per centum of the part used, and to allow to that teacher in the case of serious illness in any subsequent year an extended sick leave for the whole or any part of the allowance so accumulated, but not exceeding in all thirty teaching days.

The bulletin of the Canadian Teachers' Federation comments on this provision as follows: "The principle of cumulative sick pay is eminently fair and just, and teachers who go for several years with little absence for sickness, will be enabled to be away for a period not exceeding 30 teaching days (six weeks) in case of serious illness."

The law of the Province of Alberta says: "Every teacher in case of sickness certified by a qualified medical practitioner shall be entitled, at the termination of his engagement, or if engaged under a continuous agreement, at the end of each year's service, to his salary during such sickness for a period not exceeding twenty teaching days for the entire year and in case of an engagement for a shorter term than one year, for a period bearing the same proportion to twenty that the term of engagement bears to a year; but the board may at its discretion allow a salary in case of sickness for a greater number of days than that provided herein."

The school act of Saskatchewan gives the following regulation covering sick leave: "Every teacher in case of sickness certified by a qualified medical practitioner shall, at the termination of his engagement, be entitled to his salary during such sickness for a period not to exceed 20 days for the entire year, or in case the teacher is in charge for a shorter term than one year for a period bearing the same proportion to 20 that the number of teaching days during which he was in charge of the school bears to 210:

"Provided that in the case of a teacher whose employment by a district is continued for more than one year, the board of trustees may make allowance in lieu of salary during the period of sickness as it deems advisable, such allowance not to exceed the salary for a period bearing the same proportion to 20 that the number of teaching days during which he has been employed by the district bears to 210."

The Province of Manitoba has the following law: "In case of sickness, certified by a medical man, every teacher shall be entitled to his salary during such sickness for a period not exceeding four weeks for the entire year, which period may be increased at the pleasure of the trustees."

The school regulations for the Province of Ontario provide for four weeks sickness or



LUCIUS K. HALLETT.  
President of the Denver School Board.

dental treatment on the part of the teacher:

"Every teacher shall be entitled to his salary notwithstanding his absence from duty on account of sickness for a period not exceeding four weeks in any one year of his employment if the sickness is certified to by a physician, or in a case of acute inflammatory condition of the teeth or gums by a licentiate of dental sur-

gery, but the period of four weeks may in any case of sickness be allowed and extended at the pleasure of the board without a certificate."

### LUCIUS K. HALLETT

President, Board of Education, Denver, Colorado

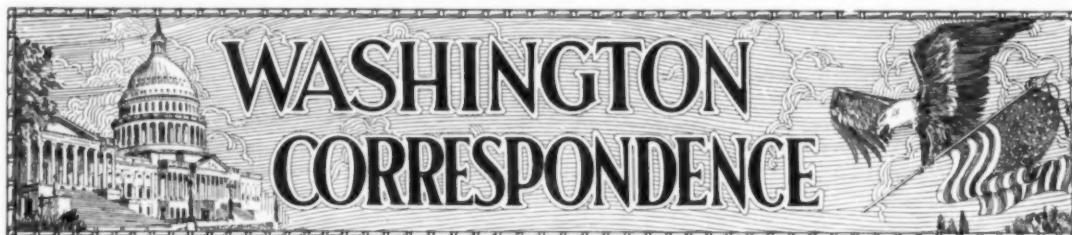
One of the most progressive school systems in the United States is found at Denver, Colorado. It not only provides most modern school housing for the children but also maintains a high order of instructional service. Its board of education is enterprising and energetic in holding to the mental and moral interests of the school child. Lucius K. Hallett has headed the school system, in the capacity of president of the board of education for several years.

The board recently carried a school bond issue of \$1,500,000 which was badly needed to complete its building program, amid the fiercest fire of antagonism and the most vicious newspaper attacks. The attacks were made not only against the project but against Mr. Hallett himself. Under his leadership, the school forces calmly yet fearlessly held to the affirmative side of the case and won the support of the public. The interests of the schools were at stake, and personal attacks were ignored.

Under President Hallett's administration a comprehensive building program, involving several million dollars, was carried out. His first job in the interest of the school some eight years ago was to head a survey committee which entered upon a study of the school housing situation and produced a masterful report. Since then thirty schools have been built, innovations in administration have been introduced, and the whole system raised to higher standards of efficiency.

Mr. Hallett is regarded as one of Denver's big men, physically and intellectually. He possesses vision and action, and fearlessly asserts that which he believes. He believes in the physical well-being of the rising generation as well as in their mental and moral advancement, and works incessantly to the achievement of these ends.

The cartoon of Mr. Hallett shown here was drawn by E. M. Jackson of the Standard Electric Time Company of Denver. Mr. Jackson, who is a capable business man, fosters art in his leisure moments in a worthwhile manner.



A. C. Monahan, Formerly U. S. Bureau of Education

### NATIONAL COMMISSION ON SCHOOL ADMINISTRATION

Dr. Frank W. Ballou, president of the Department of Superintendence of the National Education Association, has announced the organization of a National Commission to study the proper relationship which should exist between the educational or instructional aspects of public school systems, and the business aspects. The commission will consist of nine members, two to be appointed by Secretary Hubert Work, Secretary of the U. S. Department of the Interior, in which the Bureau of Education is located; two by Secretary Herbert Hoover, Secretary of the Department of Commerce, representing business interests, two by Dr. Frank W. Ballou, President of the Department of Superintendence, representing public education, and two by the National Association of Public School Business Officials. Dr. Ballou as President of the Department of Superintendence, will be the chairman.

It is a well recognized fact that the adminis-

tration of any system of public education involves not only an educational program but also a business program. The system must be financed, which involves taxation or bond issues or both, thereby involving every man, woman and child in the community. People of the nation are making greater and greater demands upon the public schools and with increased enrollments, increased costs of construction, and increased living costs making higher salaries for teachers imperative, the costs of the nation's educational system are rapidly increasing and will continue to increase indefinitely. The time has arrived when the need for a study of both the educational and financial aspects of city school systems is imperative. The best method of administration of the educational and business affairs of the public schools must be determined in the near future if economical administration and the most efficient results are to be secured.

(Continued on Page 70)



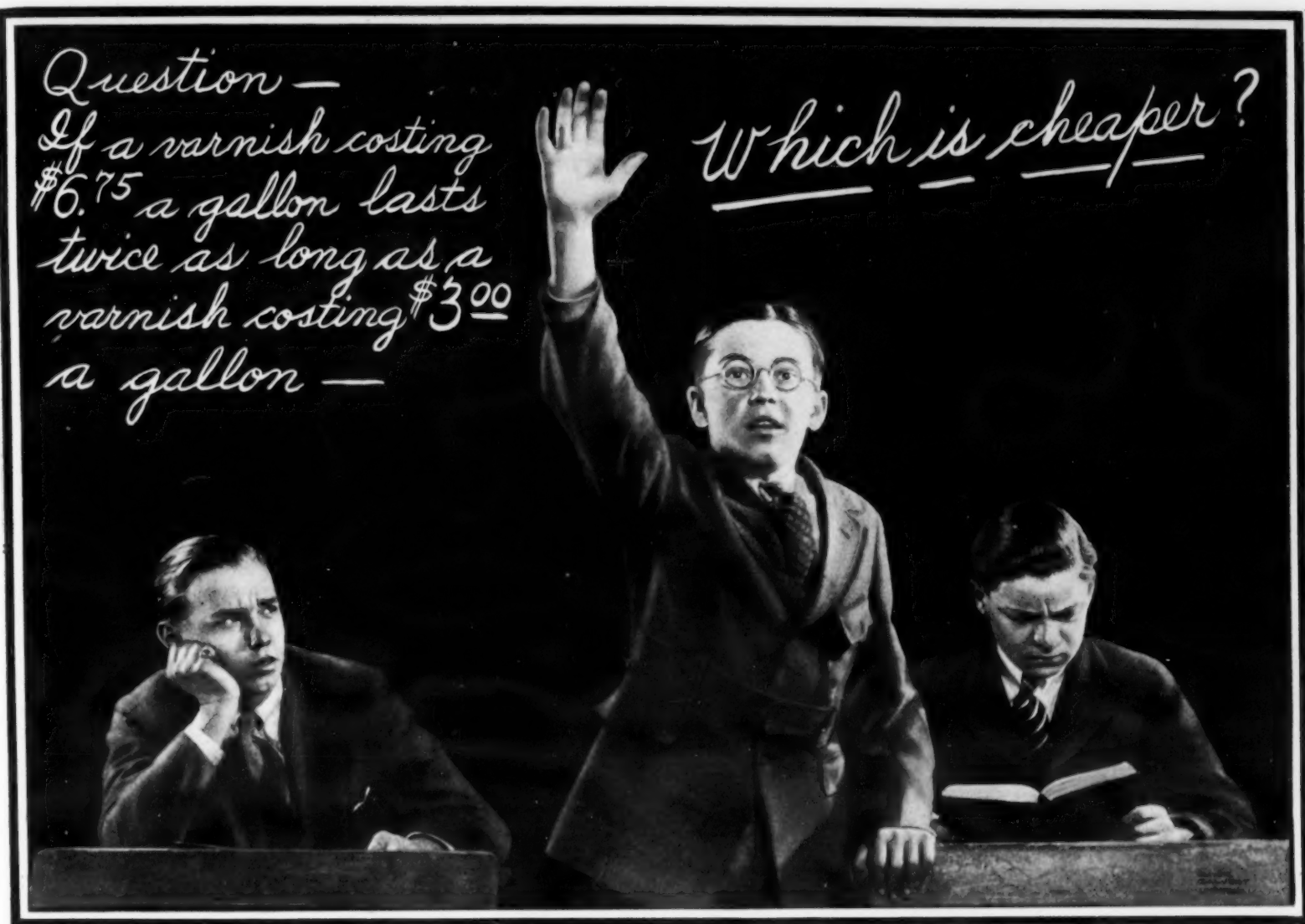


Photo by courtesy of American Optical Company

## A Problem in Maintenance Cost

ANY school boy will answer the question on the black board in a minute. But he won't figure on the cost of labor! Neither will he consider the time and trouble of doing the job 2 or 3 times.

Every purchasing agent, however, knows that even a large apparent saving in first cost doesn't always mean a saving in the long run. He recognizes the difference between cheapness and economy.

Valspar, although more expensive than ordinary varnishes, means real economy. It saves the cost of frequent refinishing—does away with the trouble and loss of time in moving the furniture out and back again. *For Valspar lasts at least twice as long as most varnishes—and is better looking.*

Desks, tables, floors and woodwork finished

with Valspar can be washed with hot soapy water and ammonia. Valspar protects woodwork against spilled liquids of all kinds. Acids, alkalis or strong disinfectants never harm a Valsparred surface.

The experience of hundreds of thousands of Valspar users the world over bears out every claim for Valspar superiority in looks, durability and waterproofness.

### Valspar and Valspar in Colors

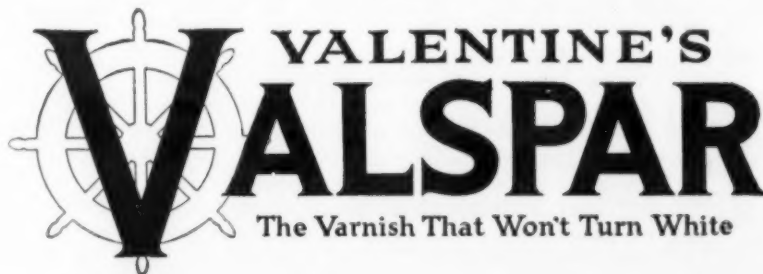
Valspar and Valspar in colors meet every need. Clear Valspar Varnish gives a bright, wear-proof finish; Valspar Varnish-Stains color the wood in beautiful wood effects and Valspar it at the same time. Valspar-Enamels cover the surface with solid color. All three are waterproof, durable, elastic.

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## WASHINGTON CORRESPONDENCE

(Continued from Page 68)

In addition to studying such fundamental questions as business administration and methods of financing, the work of the commission will include in its program such subjects as textbooks, paper, ink, and other materials used in actual instruction, heating, lighting, ventilating apparatus and other machinery, up-keep, painting and repairing, replacement of school furniture equipment, surfacing of yards and playgrounds, landscape gardening, the construction of new buildings including provision for financing, development of plans by competent architects within or without the school system, supervision of construction, the purchase of sites for school buildings which will anticipate the growth of the population as well as provide adequate play facilities and room for extension of the school plant, and adequate equipment for special purposes.

In this study, care will be taken not to duplicate work already completed by the Educational Finance Inquiry Commission appointed in 1921 by the American Council on education and carrying out its work under its auspices. This Commission was planned at the meeting of the Department of Superintendence, at Atlantic City, in 1921. It was financed by the Commonwealth Fund, the General Education Board, the Carnegie Corporation, and the Milbank Memorial Fund. Its study, as indicated by its name, had to do with the cost of education, and with ways and means of securing financial support for essential educational undertakings.

Headquarters of the commission will be in Washington. The first meeting will be held this month (December). It is planned to have the work well under way by the time of the meeting of the Department of Superintendence in February. Dr. Strayer and Dr. Finegan will probably devote a considerable part of their

time to the work for the first few months. They will be assisted by the U. S. Bureau of Education and the Department of Commerce. Finances will be provided by the organizations participating.

### PUBLIC SCHOOL TEACHERS AND CITIZENSHIP

The board of education of the District of Columbia has just passed a citizenship regulation, which requires that all candidates for positions in the public schools of the District be *bona fide* citizens of the United States. The regulation does not apply to persons at the present time on the list of eligible candidates for appointment in the District schools, but to those taking examinations in the future. The order reads:

"That on and after November 4, 1925, no person shall be eligible to enter any examination held for the purpose of qualifying persons for appointments to any positions in the public schools of the District of Columbia who is not already a *bona fide* citizen of the United States or who has not at the time of entering the examination taken out the first papers to become a naturalized citizen of the United States and is taking all steps necessary to complete his or her naturalization. In each case certified evidence from duly constituted government authorities must be submitted."

This action on the part of the authorities of the District of Columbia is in keeping with regulations in several of the states. Among those that require all public school teachers to be citizens of the United States, or that require an oath of allegiance to the Constitution of the United States, are Colorado, Idaho, Ohio, Oklahoma, Oregon, Montana, Nebraska, Pennsylvania and South Dakota. In many of these states the law applies to teachers in private schools, as well as in public schools. The Nebraska law, for instance, reads as follows:

"That no person shall be qualified, licensed or permitted by the state or county superintendents of public instruction to teach in any public, private and parochial school in the state

of Nebraska unless such person is a natural born or duly and fully naturalized citizen of the United States."

As an example of the "oath of allegiance" law, South Dakota may be quoted:

"No teacher's certificate of any grade shall hereafter be issued in this state unless the applicant shall first take and subscribe an oath to support the Constitution of the United States and of the state of South Dakota." \* \* \*

"No teacher shall hereafter be employed in any private or parochial or public school, or in any other educational institution within this state who shall not have taken and subscribed an oath of allegiance as required in section one hereof, either preliminary to the issuance of his teacher's certificate or at the time of his employment." \* \* \*

### WASHINGTON'S FIVE-YEAR BUILDING PROGRAM

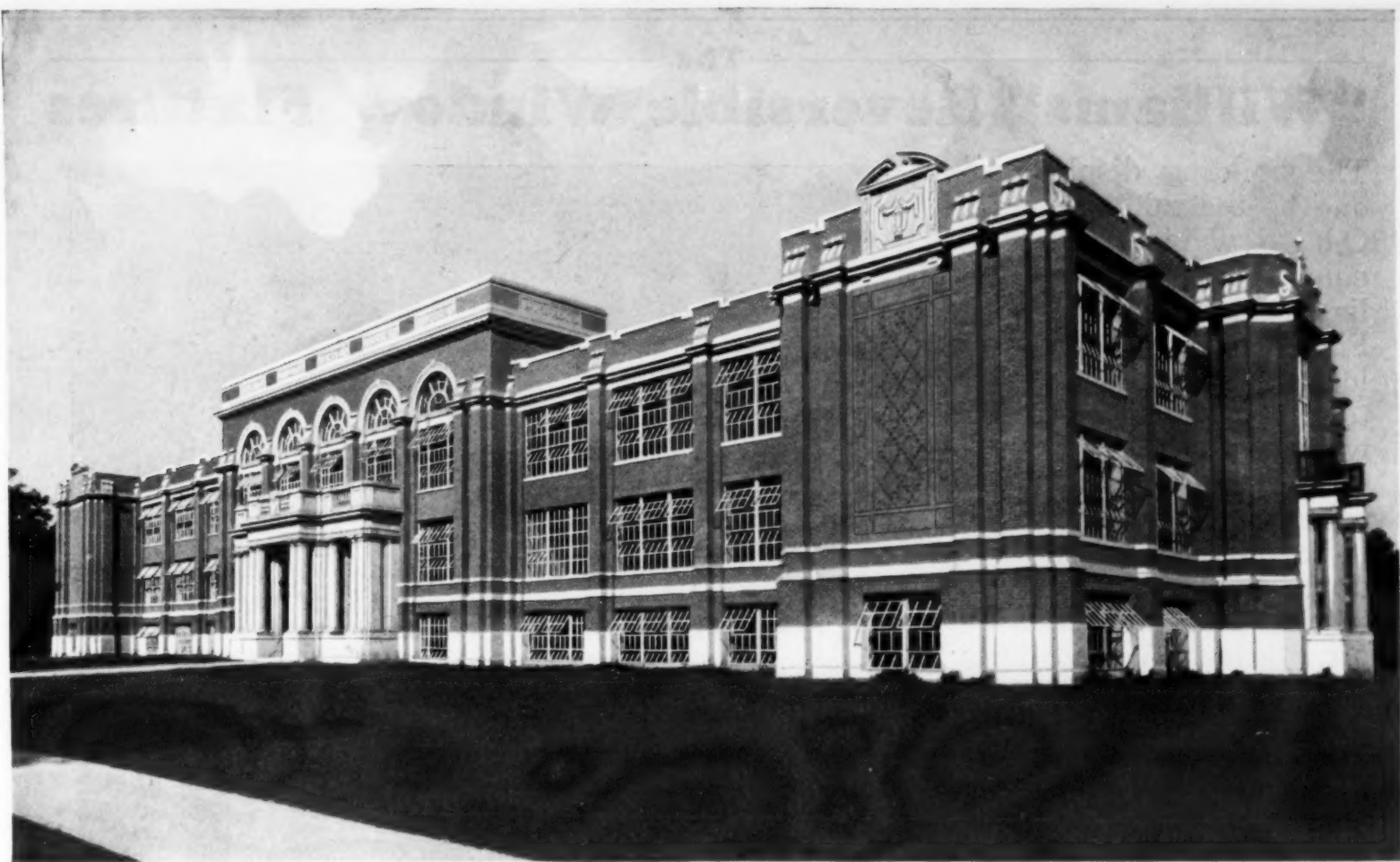
With the reconvening of Congress in the near future, interested supporters of the public school system of the District of Columbia are making definite plans for securing the necessary money to carry out the five-year building program.

This program adopted by the past Congress and reviewed in these columns, contemplates a program for school buildings for the District for the next five years to take care of the most pressing needs, at a cost of approximately \$19,000,000. However, the adoption of the program was a legislative act and did not appropriate the money necessary to carry it out. Congress has appropriated \$4,214,000 for the present year, and if the program is to be followed, equal amounts must be available each year. Therefore, the present activities.

The call for action comes from the office of the superintendent of schools, Dr. Ballou, who in a recent statement, says relative to the five-year building program and the present need for support in securing appropriations for the coming year:

(Concluded on Page 72)





Central High School, Xenia, Ohio. Pretzinger & Musselman, Architects, Dayton, Ohio.

## Here is Three-Story Room Space in a Two-Story School Building

**F**ENESTRA Reversible Windows, being designed from bars of solid steel, are practically indestructible. They cannot burn. They do not warp or decay.

They open and close smoothly and easily, always—never shrink, swell, stick or rattle. Children and teachers can operate them without effort.

Swinging out at the top and swinging in near the bottom, they control ventilation by removing impure air near the ceiling and admitting fresh air without danger of draft.

Ventilators are reversible for easy cleaning from the inside, yet do not interfere with draperies or roller shades.

Sturdy construction reduces maintenance costs, and small glass lights are easily and economically replaced when broken.

A wide variety of types, sizes and combinations provides the architect with economical standard units suitable for any type of construction.

**H**ERE, in the Central High School at Xenia, Ohio, where Fenestra Reversible Ventilator Windows are used throughout, the basement floor is actually flooded with daylight. This large floor area for classroom use is virtually as well lighted and ventilated as the two upper floors.

Where window openings are necessarily limited in size, as in basement floors, Fenestra, because of its narrow frames and slender muntin bars, admits all the natural light it is possible to get. It insures 30 per cent *more* light than wood windows of the same size. And

because the wide casings are omitted, Fenestra windows conserve more wall space for blackboard use, an advantage every architect acknowledges.

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*T. Ralph Ridley, Architect*

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Provides:**

*Ideal overhead ventilation  
Reversibility for inside cleaning  
Greater light area  
More weathertight construction  
Better shading facilities  
Simplified frame construction  
Weightless windows*



(Concluded from Page 70)

"When this legislation shall have been transposed into the accomplishments in the form of the buildings contemplated in this act, the effect on the education of the public school children of Washington during the next two or three generations will be equal in importance to that of any legislation heretofore enacted by Congress. The present and future citizens of Washington owe Congress and all other agencies which assisted in the passage of this law a debt of profound gratitude for the educational facilities which this law makes possible."

"This legislation will affect the education and physical welfare of from 70,000 to 80,000 children annually during the lifetime of the new buildings now under construction and the old buildings being remodeled."

"The five-year school building program act is only a legislative authorization; the act does not carry appropriations. It becomes necessary, therefore, for all those interested in the welfare of the public schools to join hands in securing the necessary appropriations for putting this extremely important legislation into effect during the next five years."

"As the united efforts of the community have resulted in securing the passage of this legislation, may the same united efforts support the securing of the necessary appropriations to carry the legislation into effect so that the full measure of possible results may be realized by June 3, 1930."

### CONCRETE BUILDING UNITS

"The Properties and Manufacture of Concrete Building Units" is the title of a new bulletin by the U. S. Bureau of Standards of much interest to school authorities charged with the responsibilities of the erection and repair of school buildings.

The general plan in the preparation of the bulletin has been not to give definite recommendations assumed to apply under all conditions of concrete-products manufacture, but to discuss along general lines the various factors governing the quality of the units. The maker is urged to study the available materials and to endeavor to improve his methods of manufacture

so that the highest uniform quality of unit will be produced under the limitations set by local conditions.

The more important properties of concrete units are discussed, and some of the advantages of their use in masonry-building construction are set forth. Concrete block, tile, and brick have been defined and the recommendations of the Division of Simplified Practice for the standardization of sizes for the several types of units to avoid waste are given. The recommended standard sizes adopted are given, as well as the large number of sizes in present use. This comparison shows that by maintaining definite standards of size for the units, a large saving will result in the outlay for machinery, molds, and pallets, as well as the stock to be carried in yards.

Various materials widely used in the manufacture of concrete products are described in detail. The questions of proper size and quality of both coarse and fine aggregates are discussed, and the use of admixtures, facing materials, and coloring processes are outlined. The need of careful proportioning, the proper time of mixing, the methods of molding, and the several means of curing are discussed at some length. The requirements for concrete units are dealt with from the structural, architectural, and fire-resisting viewpoints. The methods for conducting tests of concrete products and the proper interpretation of data from test reports are outlined. Factors affecting the financing of a concrete products' plant are considered from an economic standpoint, and suggestions are made to prospective investors to investigate fully all local conditions which may affect the life and successful operation of a plant.

The circular proper is followed by a bibliography of books, technical papers, and periodicals dealing with various phases of the manufacture

of these units, of particular interest to those contemplating entering this line of work. There are also given several specifications from the standards of the American Society for Testing Materials governing the quality of aggregates and the method of testing, together with the American Concrete Institute's specifications for concrete block, tile, and brick.

### BALTIMORE RULES CONCERNING MARRIED WOMEN TEACHERS

Married women teaching in the Baltimore public schools will be required to take a leave of absence without pay for at least two years following the birth of a child, according to a rule to that effect just adopted by the school board.

Until June, 1924, the only married teachers who were acceptable as teachers were widows and women who had been legally separated from their husbands. When a woman married she was required by the school board to resign. After the legislature had passed a bill permitting married women to teach, numbers of teachers married and continued to hold their positions.

The rule was made, it is said, because it was felt that a woman with a small child could not give the proper attention to the children in her classes. If she were a real mother, interested in her offspring, it was felt, her attention would be distracted from her class by thoughts of her baby at home.

—Dr. Merrill E. Champion, director of the division of hygiene of the Massachusetts Department of Health strongly advocates the establishment of a system in public schools in Massachusetts whereby hot lunches of wholesome food may be served at cost to school children during the late fall and winter months. Although the practice of mid-morning lunches in public schools is now general, the next step is the general adoption of a hot lunch service during the noon recess. Consideration should be given to a well-balanced diet, according to Dr. Champion.



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Holton Arms School, Wash., D. C.	Christian Science Church, Cleveland
Wellesley College, Wellesley	Grosse Pointe Country Club, Detroit
Mitchell Jr. High School, Denver	Children's Hospital, Columbus
Boston English High School, Boston	Jefferson Hospital, Philadelphia
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## SCHOOL LAW

### Schools and School Districts

The Arkansas laws of 1899, No. 159, § 1 (Crawford & Moses' Digest, § 9285), and the laws of 1919, No. 344, § 5 (Crawford & Moses' Digest, § 9108), directing the credit of funds arising from the sale of sixteenth section school lands to the permanent school funds of the state, are held not unconstitutional. Title to such lands is vested absolutely in the state, and the state legislature has exclusive control over the fund; the Arkansas constitution, art. 14, only requiring that the funds shall never be used for any other than a school purpose, and the consent of Congress by an act of Congress March 8, 1898, was unnecessary to authorize that such funds shall be credited to the permanent school fund rather than to the funds of special school districts.—Sloan v. Blytheville Special School Dist. No. 5, 273 S. W. Reporter (West) 397, Ark.

When a petition for the annexation of one school district to another has been presented to the trustees of the latter, under the Arizona civil code of 1913 (par. 2722½ added by the Arizona laws of 1921, c. 72), and has been approved by them and transmitted to the county superintendent of schools, requests by the signers to have their names withdrawn from the petition and protests against the annexation filed with the county superintendent more than fifteen days after the petition was approved are of no avail.—Valley Center School Dist. No. 20 v. Hansberger, 237 P. Reporter, 957, Ariz.

While the legislature of Michigan has a right in creating new school districts to transfer the property of an old district to a new district, in the absence of express legislation on the subject, the property of the old district, except that in annexed territory, remains its property unaffected by the annexation.—School Dist. of City of Saginaw, East Side v. School Dist. No. 6 of Buena Vista Tp., 204 N. W. Reporter 737, Mich.

Where a portion of a township was annexed to the city, and under the Michigan public acts

of 1917, No. 166, § 6, a portion of a township school district so annexed automatically became a part of the city school district, the latter was not entitled to the primary school money of a township school district apportioned to it by the superintendent of public instruction, under the Michigan complete laws of 1915, § 5644, although it was apportioned on the basis of the school census before annexation.—School Dist. of the City of Saginaw, East Side v. School Dist. No. 6 of Buena Vista Tp., 204 N. W. Rep. 737, Mich.

School districts must be such as to afford the children within their boundaries an opportunity to attend school with a reasonable degree of comfort.—People v. Kinsey, 147 N. E. Reporter (West) 408, Ill.

Where the trustees of a school district consented to the consolidation of schools under the Illinois State Educational Act (General Acts, 1919, p. 585, article 5, § 10) only on the expressed condition that the consolidated schoolhouse be located on a designated site, the action of the county board in changing the location of such a site was a breach of condition which nullified the consent, and rendered the consolidation invalid.—People v. Kinsey, 147 N. E. Reporter 408, Ill.

### Government of Schools, Officers, and District Meetings

The findings of a fact, made by the commissioner of education of Rhode Island on an appeal to him for a resolution of a town school committee, is held conclusive.—Hasbrouck v. School Committee of Bristol, 128 Atlantic Rep. 449, R. I.

A married woman, who owned personal property assessed in her husband's name, on which the husband paid taxes for the benefit of both, was a taxpayer within the Missouri Revised Statute of 1919, § 11213, qualified to be district school director, in view of sections 12756, 12801, there being no presumption that the property was paid for with the money belonging to the husband. A "taxpayer" is one who pays, or who is liable to pay, a tax.—State of inf. Bellamy, ex rel. Harris v. Menengali, 270 S. W. Rep. 101, Mo.

The commissioner of education is the executive director of the New York State education

department, charged with the general duty of overseeing its administration, and has quasi-judicial power to determine among others, such controversies as may arise from the acts or failures to act of a board of education, or a school district meeting, but his power is not unlimited. (Per Van Kirk, J., and Cochrane, P. J.)—In re Board of Education of Union Free School Dist. No. 2 of the Town of Union Free School Dist. No. 2 of the Town of Brookhaven, Suffolk County, 210 N. Y. S. 439, N. Y. App. Div.

Boards of education and district meetings have only such powers and duties as are delegated by statute, and the commissioner of education cannot add to or take away therefrom. (Per Van Kirk, J., and Cochrane, P. J.)—In re Board of Education of Union Free School Dist. No. 2 of Town of Brookhaven, Suffolk County, 210 N. Y. S. 439, N. Y. App. Div.

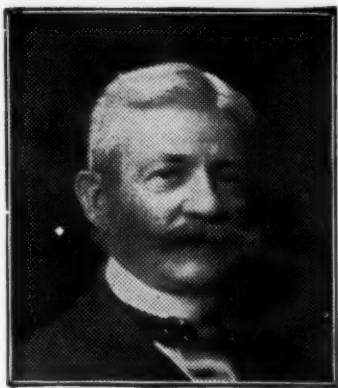
The powers of the board of school directors of a school district are limited to those expressly delegated to it, and under the Missouri revised statutes of 1919 (§§ 11159, 11223), in respect to the application of separate funds, directors are personally liable for the misapplication of moneys in the teachers' fund to purposes other than the payment of teachers.—Consolidated School Dist. No. 6 of Jackson County v. Shawan, 273 S. W. Rep. 182, Mo. App.

In an action by a school district against the directors for misappropriation of moneys, where each defendant admitted that he knew the warrants had been issued, an admission of warrants is held proper, notwithstanding the fact that there was no showing by records, which the clerk of the board is required to keep, that board had legally authorized the issuance of the warrant.—Consolidated School Dist. No. 6 of Jackson County v. Shawan, 273 S. W. Rep. 182, Mo. App.

Where the teachers in a school district still have a claim against the district for part of the salary due them, a school district is entitled to recover against the directors for misappropriation of the teachers' fund, although the district has never been called on to pay the balance.—Consolidated School Dist. No. 6 of Jack-

(Continued on Page 77)





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(Continued from Page 74)

son County v. Shawan, 273 S. W. Rep. 182, Mo. App.

The directors of a school district are liable for the misapplication of the teachers' fund to purposes other than the payment of teachers, notwithstanding the fact that it was done in good faith and without willful intention.—Consolidated School Dist. No. 6 of Jackson County v. Shawan, 273 S. W. Rep. 182, Mo. App.

### School District Property

Though the duty of maintaining a system of schools was delegated to a municipality, incorporated for general purposes, such a duty is public and governmental, and a municipality is not liable for an injury to a pupil from the falling of an archway of a school building, due to the negligence of its agents.—McVey v. City of Houston, 273 S. W. Rep. 313, Tex. Civ. App.

A testator, who left a bequest for the erection of a public schoolhouse, could not by the terms of his gift vary the statutory duty (General Laws 1923, c. 70, § 3) of the town school committee to locate all schoolhouses in the town.—Hasbrouck v. School Committee of Bristol, 128 Atlantic Rep. 449, R. I.

A suggestion of a financial town meeting as to the undesirability of a site for a schoolhouse does not bind the town school committee, but must be regarded as merely advisory, in the view of the Rhode Island General Laws of 1923, c. 70, § 3, placing the duty to locate school houses on the town school committee.—Hasbrouck v. School Committee of Bristol, 128 Atlantic Rep. 449, R. I.

The school site, selected under the Rhode Island General Laws of 1923, c. 70, § 3, by the town school committee, pursuant to a testator's bequest, if in other respects suitable, will be approved, in the absence of a showing of the illegality of the action by the committee.—Hasbrouck v. School Committee of Bristol, 128 Atlantic 449, R. I.

### School District Claims

In an action against a city and an independent school district for an injury to a pupil from a falling archway in a public school building, where a petition contained no direct allegation that the city either negligently erected or maintained a school building, but merely alleged that either one or other of the defendants was

chargeable with the negligent act complained of, it is held that the city's demurrer thereto was properly sustained.—McVey v. City of Houston, 273 S. W. Rep. 313, Tex. Civ. App.

Under the Oklahoma Constitution, Article 10, §§ 9, 10, limiting the amount of taxes to be levied for all school purposes, do not interfere or conflict with the sections 26, 27, 28, providing for voting and issuing school bonds to build schoolhouses.—Kirk v. School Dist. No. 24, of Greer County, 234 Pac. Rep. 596, Okla.

Where the school districts have been consolidated, in determining the indebtedness of the consolidated district for the purpose of a bond issue, it is proper to charge as a debit outstanding bonded indebtedness of one of the districts forming the consolidation, and to offset against such indebtedness the value of the assets, including the school building owned by such a school district.—Wright v. Consolidated School District No. 1, Major County, 234, P. 736, Okla.

A special election of the school district, authorizing the issuance of bonds for a school building, was not void because the unqualified voters voted, where if the illegal votes cast were deducted from the majority proclaimed by the election board, there would yet be a sufficient majority of votes to carry the proposition.—Strawn v. Independent School District of Indianola, 203, N. W. Rep. 12, Ia.

In suits against the school board of a district and the tax collector to annul a special school district tax in which no injunction against the collection of the tax was prayed for or issued, the tax collector was not entitled to attorney's fees on the rendition of the judgment of upholding the tax.—Louisiana & A. Ry. Co. v. School Board of Webster Parish, 103 So. Rep. 318, La.

### Teachers

No one has an inherent right to teach in public free schools, but the state may prescribe qualifications and name the conditions under which the privilege of teaching may be exercised.—Marrs v. Matthews, 270 S. W. Rep. 586, Tex. Civ. App.

The provision of Vernon's Annual Civil Statute Supplement of 1918, article 2814, empowering the state superintendent of public in-

struction to cancel the certificate of the teacher issued under the Vernon Sayles' Ann. Civ. St. of 1914, articles 2780, 2788, who is unworthy is not invalid as too vague. "Unworthy" means a lack of worth and absence of those moral and mental qualities required to enable one to render a service essential to the accomplishment of the object which the law has in view.—Marrs v. Matthews, 270 S. W. Rep. 586, Tex. Civ. App.

A certificate to teach in public free schools is a mere license revokable by the state at its pleasure.—Marrs v. Matthews, 270 S. W. Rep. 586, Tex. Civ. App.

Where the school board, without holding any meeting in its official capacity or giving a teacher notice, dismissed her on the indefinite or immaterial complaints of children to parents, and of parents to the members of the board, it is held by the court that there was no charge, notice, hearing, or proof of "good cause," as required by the Colorado laws, § 8435.—School Dist. 25 in Weld County v. Youberg, 235 P. 351, Colo.

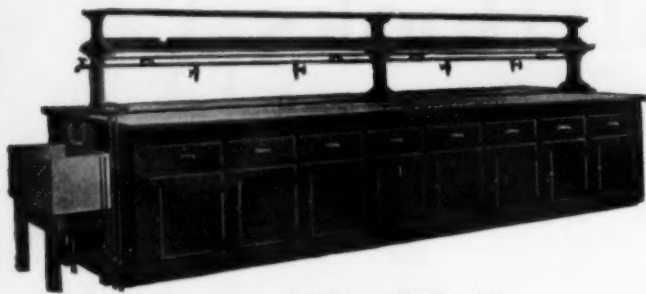
The teacher, who was illegally removed, could not sue for salary during the period when she rendered no services, without first being reinstated.—Levitch v. Board of Education of the City of New York, 209 N. Y. S. Rep. 271, N. Y. App. Div.

In view of the Georgia political code of 1895, § 1360, contracts between county boards of education and teachers in schools under their supervision must be in writing.—Orr v. Riley, 128 S. E. Rep. 669, Ga.

### Pupils

That minor daughter of a non-resident attended a private school for two years, where she lived and was boarding, is held not to establish her residence in that township, entitling her, under the New Jersey school law of 1903, § 116, as amended by the act of March 27, 1912 (P. L. p. 284), to attend the township high school without tuition, in view of the public policy as indicated by the New Jersey constitution, art. 4, § 7, pl. 6, and the New Jersey general school law, §§ 153 and 154, requiring children to attend the public schools in the districts where those having legal control of them reside. "Legal control" signifies the status of a person in whose custody the child is and means a parent or

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guardian, and not relationship between the pupil and teacher or teacher and pupil boarder.—Mansfield Tp. Board of Education v. State Board of Education, 129 Atlantic Rep. 765, N. J., Sup.

In an action to recover the sums paid by a school district, for transporting the children of a director to school, a finding that a husband of a director arranged with persons, contracting with the school district, to haul children to and from school, whereby a community of himself and wife was to benefit through the contracts, is held sustained under the evidence.—Directors of School Dist. No. 302, Thurston v. Libby, 237 Pac. Rep. 505, Wash.

Although a school district is authorized to contract for the transportation of children to and from school, under the complete statutes of Washington (§ 4776), contracts to haul the children of a director of a school district to and from school, made by a district with persons who were working for the husband of a director, and living with them, and paid part of the proceeds of the contracts to them, are held to have such interest in the contracts as to invalidate them, under section 4783.—Directors of School Dist. No. 302, Thurston County v. Libby, 237 Pac. Rep. 505, Wash.

Even though it would be difficult for a school director and her husband to send their children to school without some provision for transportation by a school district, contracts violating the school laws of the state of Washington (§ 4783), because of pecuniary interest of the director therein, could not be sustained on the ground that under section 5072, making education compulsory, criminal liability would attach except for such contracts, as such liability does not exist where there is sufficient reason for such failure.—Directors of School Dist. No. 302, Thurston County v. Libby 237 P. 505, Wash.

The resolution of a parish school board closing the public schools for the year 1925-26 because of the impossibility of continuing them and at the same time adjusting the board's finances so as to be on a fiscal year basis, instead of a calendar year basis, beginning July 1, 1928, is held premature, arbitrary, and unauthorized by the Louisiana school laws, Act No. 100 of 1922, §§ 27, 32.—State ex rel. Day v. Rapides Parish School Board, 103 So. Rep. 757, La.

## LAW AND LEGISLATION

—The Wisconsin Department of Public Instruction has ruled that an alien may not legally be a member of a school district board. If, however, he is elected and performs the duties of the office as required by law, he is what is known as an officer de facto, and his acts will be as valid and binding upon the district as if he were an officer by right.

—The Wisconsin Department of Public Instruction has ruled that in any county having a population of three hundred thousand or more, the board of any town or village or common council of any city which does not maintain a high school, may provide for the transportation of children living in such town, village or city to any other school in the county which is supported by public funds and which gives courses above the eighth grade attended by children resident in such town, village or city. Milwaukee is now the only county in the state with a population of three hundred thousand or more, consequently the law can have no general application.

—The same Department has ruled that school officers who sign notes for money to carry on the school without authority given by electors, or by the statute, should take care to sign their names with their official designation, and the note should contain a plain statement to the effect that the money borrowed is for the use of the school district. Of course, regular board meetings must be held and the name of each school officer should be signed with his official title.

—The citizens of Rush Township, Pa., have been restrained by court order from conducting a school without the order of the school board. They took charge of an abandoned school and hired a teacher in order to obviate sending their children to another school two miles distant.

—The chancery court of Little Rock, Ark., has issued a mandatory injunction requiring the state school authorities and the Arkansas School Book Depository to include in the list of authorized textbooks two books, Overton's Hygiene and Physiology, published by the American Book Company.

—Five Ohio school boards were directed by the supreme court of that state to contribute to the state teachers' retirement fund. The

districts ordered to pay up were Perry school district, Ashland county; New Weston and Wabash Special No. 4 districts, Darke county; and Sherman and Short districts, Shelby county.

—Among the laws recently adopted by the state of Tennessee is one which reads that "It shall be unlawful for any teacher to keep the doors or windows of the school building locked while the pupils are assembled therein or to permit any screens to be fastened in windows of said building that would prevent the egress of pupils in case of fire or other emergency."

—The Wisconsin Department of Public Instruction has ruled that the mere want of a written contract for the transportation of children to and from school does not warrant the school district board in refusing to pay a parent for transporting his children, but if the board demands that a parent shall sign a reasonable contract the parent should comply with the requirements of the statute. Both parties in interest are then protected in their rights and litigation made unnecessary.

—Under a recent decision of the Wisconsin state education department, a school district is not financially liable for an injury to a child while engaged in play in or about the school building or upon the school grounds. This rule applies also to an injury that may occur to a child while being transported over the highway leading from the school grounds. The driver of the transportation vehicle is not liable for accidents occurring while in the discharge of the duties imposed by his contract to transport children to and from school, the district becoming liable under the provision of the workmen's compensation law, and no contract, rule or regulation shall exempt the district, the employer, from the provisions of the law.

—The Winnetka plan of individual instruction is to be installed in the Franklin School, Stamford, Conn., by the end of the school year. The plan will be given a trial in one school with the purpose of extending it later to other schools.

—William Downing, clerk of the school board of Butte, Mont., has reported 185 school windows broken during the summer vacation. The estimated cost of replacing the windows is over \$878.



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#### SUGGESTIONS FOR INSPECTING SCHOOLS

School board members who inspect school buildings will be interested in a series of points outlined by Dr. Florence A. Sherman, assistant medical inspector of schools for New York state. The points were originally outlined for parent-teachers' associations but they will be of decided help to school board members.

- Is the teacher an example of health?
- Is she keen and alert?
- Is the building clean, light, and attractive?
- Is there a thermometer?
- Is it hung in the right place?
- Is the temperature between 65° and 70° F.?
- Is the ventilation good?
- If a stove is used, is it jacketed?
- Is the room overcrowded?
- Are the desks and chairs adjustable?
- Does the light come from the left side or left and rear?
- Are there window shades?
- Are the blackboards properly placed?
- Are dustless crayons used?
- Is there moist sweeping and dusting?
- Are the books new and clean?
- Does the drinking water come from a pure source?
- Is there a drinking fountain?
- Is the water stream high enough to prevent mouth contact?
- Are there individual cups?
- Is there a porcelain covered water container?
- Are the toilets clean, free from odor, well ventilated?
- Is there toilet paper?
- Are the coat rooms adequate and well ventilated?
- Is the playground ample and cared for?
- How long is the play period and is it supervised?
- Is there sufficient fire protection?
- Is the entire school plant and equipment healthful and usable?

#### DEFENDS SECRET SESSIONS

The members of the St. Louis, Mo., board of education are not of one mind on the question of executive sessions. The members of the committee on school buildings, Richard Murphy, Stephen Wagner, and Emil J. Barth, are op-

posed to open sessions. "To throw the meetings open to the public would subject the committee to influences from which it has hitherto been free," said Chairman Murphy.

"The officers of the board," he says, "in initiating or suggesting action along certain lines would be required to submit their recommendations in the presence of bodies of citizens by whom the motives, the purposes and the wisdom of such recommendations would be increasingly questioned, frequently, no doubt, in good spirit, but also at times under the stress of feeling in a spirit of hostility. The committees would cease to be deliberative bodies. Confidential exchange of opinion between them and the officers of the board would be impossible. In the absence of such exchange of opinion an intelligent and sympathetic consideration of policies and purposes could not be expected."

"Submission of recommendations in the presence of groups of citizens can only lessen the members' sense of personal responsibility, encourage proposals momentarily popular whether advantageous or not, and invest with undue influence bodies devoid of legal responsibility that assumed the prerogative of shaping the policies of the schools."

#### SCHOOL IN A VICE DISTRICT

The board of education of Detroit, Michigan, is confronted with a difficult problem. The so-

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—Zona Gale.

called Bishop School is located in the center of the worst district in the city. During last year 3,062 women were arrested in that district, 144 places were padlocked, 69 as disorderly houses and 75 as blind pigs.

The board called the Chief of Police together with lieutenants and detectives into conference with a view of securing a remedy. When John H. Webster, a board member, asked Lieutenant Mittle: "Would you send your children to that school?" He replies, "No, I wouldn't."

It developed that while the children may pass safely to and from school, the district is the most notoriously vicious in the city and harmful to the school.

The police promised to exert its best efforts to clean up the district. The board has deferred action in the matter for the fourth time. The problem is deemed a most difficult one.

#### Organize New Architectural Firm

Announcement has been made of the organization of the new architectural firm of Owen, Saylor & Payson, with Mr. Albert S. Owen, Mr. Wm. H. Saylor, and Mr. Chas. H. Payson as members. Each member of the firm has achieved an enviable record of many years' standing and the firm is now in position to render a superior architectural service.

—The board of estimate of the city of Baltimore has approved a request of the school board for the addition to the teaching staff of the public schools of 62 new teachers, eight principals, and six vice-principals.

#### A County School Board Convention in Wisconsin

Fully three hundred people attended the school board conference held at Sturgeon Bay, Wisconsin. Many of the school board members were accompanied by their wives.

The meeting was opened by Charles Harper, second assistant state superintendent, in which he traced the progress of education. George S. Dick, state supervisor of rural schools, spoke on the distribution of state school support and the relation of the individual district thereto.

The afternoon program opened with Mr. Dick taking the slips from the question box and answering the questions asked. The questions asked were practical and the members of the school boards received much valuable information.



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## NEWS OF THE SCHOOL BOARDS

### A MAYOR'S SCHOOL BOARD POLICY

The newly elected mayor of New York City, James J. Walker, was asked during the campaign to define his attitude on the subject of school administration. He replied by submitting the following:

"1. The injection of partisan politics or personal politics is equally detrimental to the morale that should be maintained in the public schools. So far as I have power, I will discourage both of these forms of interference in the school system.

"2. The board of education should, of course, be composed of competent men and women of good character. Their private political affiliations are of no consequence provided they keep all kinds of politics out of the schools.

"3. The pedagogical authorities of the school system may be relied upon to propose the best method of selecting the supervising staff. No layman understands all the conditions that exist, and I am opposed to outside interference, either by the mayor or anyone else not qualified to render judgment.

"4. The lawful authority of the superintendent of schools should always be upheld, but I am not prepared to assert that he is always infallible in his judgment. Therefore, the board of education must retain some jurisdiction, particularly in financial and non-pedagogical matters.

"5. The city has always and will always support the financial necessities of the schools. The board of estimate and apportionment must fulfill its functions in relation to appropriations of public money, and there should be mutual cooperation between the school authorities and the financial authorities of the city.

"6. The educational needs should be the paramount consideration in any school policy."

### AMONG BOARDS OF EDUCATION

—George P. Venable has served as member of the Lexington, Missouri, board of education for forty-two years. He is nearly eighty-eight years of age and still vigorous.

—The Boonton, N. J., board of education terminated its contract with Principal Albert S. Davis of the Englewood high school. The citizens at once protested and the students went on a strike. The contention is that the high school had attained a high degree of efficiency, that the dismissal was unjustified, and that great harm has been done Mr. Davis' professional prestige.

—The annual school report of Litchfield, Conn., classifies its expenditures under general control, instruction, operation, maintenance and auxiliary agencies, giving the percentage of each to the total. The budget for 1925-6 is also presented. Superintendent S. B. Butler states that, "We are trying to have the office records and other features of administration so regularized and systematized that things may run smoothly and efficiently, and that if circumstances produce a change in administration at any time the threads can be picked up and the

work continued with as little a break as possible." The town school committee consists of Dr. John L. Buel, chairman; Rev. John L. McGuinness, secretary; Mrs. Julia B. Doyle, Dr. Robert A. Marcy, Martin J. Monaghan, and Frederick A. Stoddard.

—The board of education of Hartford, Conn., has refused to permit collections in the schools for the rehabilitation of the warship "Constitution." The Hartford Times says "there is no reason why the school children of the United States should be asked to contribute their pennies to accomplish a job that properly belongs to the navy department." One of the smallest things the United States government was ever made to do by Congress was to solicit pennies, dimes and quarters from school children in order to save a few thousands for a billion-dollar treasury.

—There are in Milwaukee County, Wisconsin, 75 separate schools composed of 253 elected school board members. It is now proposed to unify the county into one school system believing that many advantages will be gained thereby, among them a more equitable location of school sites.

—The election of members of the Lorain County, Ohio, board of education was attended with some criticism of those named for reelection. In defense of these, the Elgin Telegram said: "No man is omniscient. It is characteristic of human nature to make mistakes. All people make them. And there undoubtedly have been mistakes made. This would be true of any administration. But we believe, regardless of this, there is no ground for accusations of intentional wrongdoing, that those in charge have had the interest of the children and the communities at heart, and they have brought to bear upon the problems the best there was in them."

—The question of permitting collections in the schools for patriotic purposes has once more come up before the board of education of Springfield, Mass. The board held to its rule against such collections which was adopted shortly after the world war. The Springfield Union commenting on the rule, says: "An important reason, one of the most important, in fact, for adopting the rule, was the opportunity presented by these subscription movements to set up class feeling among the pupils. Children of poor parents were likely to be humiliated because they could not give as much as their more fortunate classmates. It was mainly to save the feelings of the children who could give little or nothing that all subscription schemes were barred from the schools. The school board was highly commended for it at the time, and there was no intimation of lack of patriotism nor any suggestion of single-track-mindedness on the board's part."

—The Binghamton, N. Y., board of education has removed its offices from the city hall to the McLean residence, recently purchased as a part of the high school site.

—Dr. Nathaniel Selleck was re-elected president of the Danbury, Connecticut, school board. The balance of the board consists of William C. Gilbert, vice-president, E. Thatcher Hoyt, secretary, Dr. Harris F. Brownlee, Rev. A. C. Coburn, Thomas A. Keating, Timothy Farrell,

James P. Doran, Harry McLachlan, W. H. Cable, Stephen D. Moore, and Phillip N. Sunderland.

—The civic clubs of Kenosha, Wis., have endorsed the proposal to reduce the board of education from fifteen to seven members.

—The boards of education of Montana have been asked by the state authorities to encourage a buy-at-home movement. It is proposed to devote a half hour in the schools each week in familiarizing the pupils with the products of the state and the importance of keeping Montana money at home.

—State Superintendent McHenry Rhoads of Kentucky found it necessary to caution voters at the autumn elections against voting for illiterate school board candidates.

"You will observe," Mr. Rhoads remarks in a letter to county school superintendents, "that the mere ability to sign one's name does not meet the requirements of a common school education. Candidates for membership on the Board of Education should be able to read, write and compute business transactions in an intelligent manner." The Paducah Democrat adds: "Certainly an illiterate person has no business in a position of authority over schools, because unless he happen to be a very exceptional person he can not have progressive, enlightened views on educational matters, and is likely, through his narrow mindedness and ignorance, to seriously retard the development of the schools at the mercy of his judgments."

—W. E. Morris, director and secretary of the Molson, Washington, school district, has resigned his position after serving in that capacity for a period of twenty-three years. It is believed that among the 6000 school districts of Washington, Mr. Morris held the tenure record. Roscoe B. Smith was chosen to succeed him. At the reorganization of the school board Mr. Smith was elected chairman, which makes him ex-officio member of the high school board.

—F. H. Fahrenkrog is the new president of the St. Louis, Mo., board of education. Stephen M. Wagner is vice-president.

—A new administration building for the Philadelphia school system is urged by Dr. Edwin C. Broome, superintendent of schools. The business of the board of education has expanded to a point where the present quarters are inadequate.

—The school board of Coeur d'Alene, Idaho, carries liability insurance on all its school busses.

—Cincinnati, O. Upon the recommendation of Acting Supt. Roberts, the Union Board of High Schools, at its last meeting, adopted a rule that no high school pupil may represent his school in both football and basketball in one year; also, that no athletic contest may be scheduled for a place so far away that the team cannot go and return on the same day.

—Illinois has 11,916 school boards. They have 1,300,000 children under their direction and handle funds amounting to \$150,000,000 annually. A committee of the state school board association says that "approximately \$2,500,000 is annually taken out of our school taxes as fees and unnecessarily diverted from the purpose for which taxes are paid. Our school laws are in a state of chaos. Validating acts, amendments, unconstitutional enactments have thrown them into an unorganized mass, utterly confusing. Between 1909 and 1922 the Supreme court passed upon the legality of 1442 high school district organizations. The general assembly in 1921 passed nine different curative acts. A single volume of Supreme court reports contains twenty-six cases of high school litigation and on more than 50 per cent of the cases the opinion of the court was divided."

—During the recent school board campaign at Indianapolis, Indiana, Supt. E. U. Graff issued a warning to all the employees of the school system against political activities. The school law, prohibiting participation in partisan politics during campaigns, fixes dismissal as the penalty.

—The school board of Omaha Neb., has adopted a resolution favoring the employment of a business manager. The new official will handle approximately \$600,000 of funds a year, in addition to money spent for buildings, which this year totals about \$2,500,000. The salary to be paid will range from \$5,000 to \$10,000 a year.

—Daily, weekly, and monthly reports on all receipts and expenditures in high school cafe-

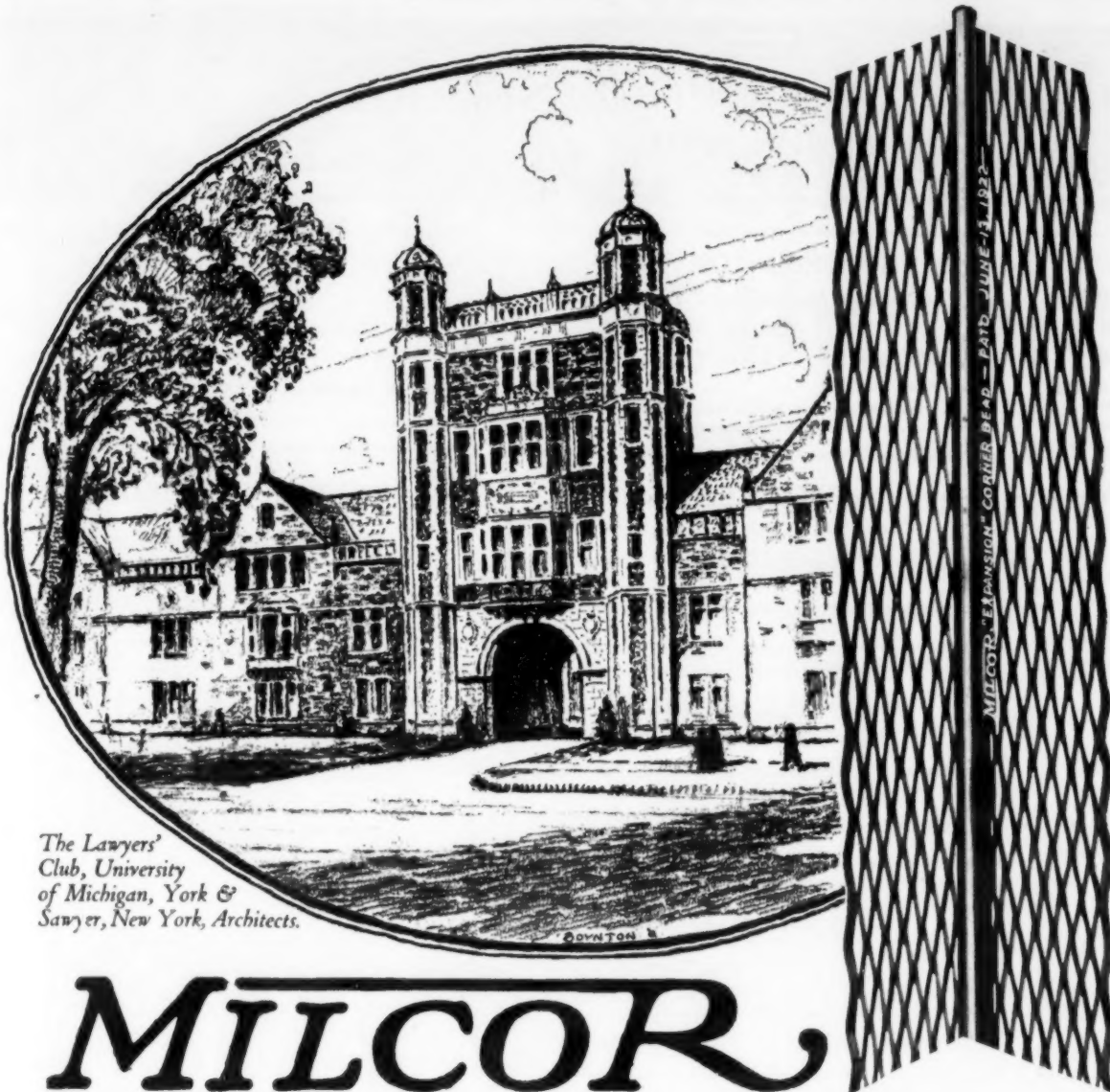
(Continued on Page 85)



SCHOOL TRAFFIC SERVICE.

The above illustration shows boy traffic officers at the Calhoun School, Chicago, Ill., protecting pupils crossing the street.





The Lawyers' Club, University of Michigan, York & Sawyer, New York, Architects.

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Chicago, Ill., Kansas City, Mo., La Crosse, Wis.

(Continued from Page 82)

terias in Indianapolis have been made as a result of a board order to this effect. The order is the result of a change under which the board is to assume the management of the cafeterias.

—Lynn, Mass. The public schools, with almost empty coal bins, have been forced to use substitute soft coal in place of the hard coal, which a local firm was unable to supply. It is called Blue Star coal and is sold at the price of \$13.75 per ton.

—East Liverpool, O. The district board of education has won its fight to introduce an elective course of religious instruction, with the decision of the Columbiana County court to dismiss the temporary injunction given to R. H. Perry. The court sustained the school board's demurrer to the evidence and ruled that the board acted within the law in granting to the ministerial association permission to use the schoolrooms during school hours for the proposed Bible study.

—Alleging irregularities in the methods of awarding contracts, issuing orders and the transaction of other business, M. M. Burke and M. J. Ryan, acting for the citizens of Rush township, Pa., have secured an order upon the school directors of the district to show cause why they should not be ousted from office. Among other allegations, it is alleged that the board refused to withhold the issuing of orders when there was no money in the school district to meet them, and that this occurred in February and May, that the board awarded a contract for \$541 to A. L. Hadesty without advertising for bids, that they failed to state the classification of expenditure upon the face of the orders drawn, and that they failed to provide payment by budget. It is alleged that they sold the Barnesville school building for \$500 when it was worth \$1,500, and that they consolidated schools at great expense to the taxpayers.

—St. Louis, Mo. By a vote of eight to three, the school board has voted against a proposal to open committee meetings to the public.

—Carrollton, Mo. The school board has erected traffic signs in the vicinity of school buildings as a means of warning automobile drivers of the approach of a school building.

—Twin Falls, Ida. Salesmen, solicitors, and canvassers are prohibited from plying their trades in the classrooms, under a rule adopted by the school board. The rule is the result of complaints of teachers that they were unable to attend to their classes due to interruptions by solicitors.

—An appeal to the Appellate court of Illinois has been taken by C. H. Lefler, who sued the school board of Peoria for \$4,000 and was awarded \$167 in the branch court. Lefler was discharged from a teaching position for insubordination in connection with trouble over a union labor organization.

—The members of the Marengo school board of Marengo, O., have been indicted by the Morrow County grand jury for allowing the use of a school building condemned by state officials. Lewis Liggett, C. B. Smith, J. R. Culver, Hubert Travis and Irwin Bennett, members of the board, were jointly indicted.

—Cleveland, O. Students of the Shaw high school belonging to Greek letter fraternities have been asked to hand in written notices signed by their parents or be reported to the school board. Under the ruling of the attorney general in 1923, students who fail to carry out the rule, must be expelled by the board.

### THE MOST POTENT INFLUENCE

During the past decade the most potent influence for progress in education has been research. Most of the large cities and many of the smaller ones have organized departments devoted to the scientific study of educational problems. Research has made progress in the face of opposition. To some, it has meant nothing more than additional reports and endless statistics. To others, who have approached it in a receptive frame of mind it has become an agency through which they may study their problems intelligently. Research means merely an unbiased study of the facts—a search for the truth. One who closes his mind to the facts, who prefers his own opinion to the truth as revealed by scientific study, stamps himself as a reactionary.—Detroit Educational Bulletin.

—Dallas, Tex. An attempt to stop the costly ravages of vandals in the public schools has been launched by the board of education. A reward of \$25 has been offered for the apprehension and conviction of any persons molesting the property of the schools.

—Messrs. F. L. Clark and Maurice Lowman, school building contractors have sued the school district at Birmingham, Mich. The suit follows a controversy as to the party responsible for the collapse of a large slab of concrete in the addition which fell during the night in January, 1924.

The contractors charged the school officials with failure to provide heat sufficient to keep the concrete from freezing and the school district in turn attribute the result to poor workmanship.

—The Wisconsin Supreme Court recently dismissed an appeal in the King case at Chippewa Falls, involving the right of the school board to bar pupils from the first grade when they have not reached a certain age.

—The school board of Springfield, Mass., has refused to set aside a rule prohibiting solicitations among school children. The board had been asked to allow subscriptions to be taken among the pupils for reclaiming "Old Ironsides."

—LaCrosse, Wis. The school board has adopted a stringent rule providing that members of high school fraternities must disband or their members declared expelled. A former rule did not provide the penalty of expulsion. The rule reads:

"No pupil of any high school or public school of La Crosse shall be permitted to acquire membership in any high school fraternity, sorority or similar secret organization in which membership is not free and open to all interested and qualified members of the school. Any organization that uses the name of the high school in any manner that causes the organization to be associated with or classed as a high school organization in any of its social or other activities shall come within the meaning of this rule. A violation of this rule shall be cause for suspension or expulsion of the offending pupil."



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—Leominster, Mass. The school board has increased the rates of tuition to out-of-town pupils from \$50 to \$58 for grade pupils, and from \$100 to \$116 for high school students.

—Disbarment proceedings were begun in the Illinois Supreme Court against William A. Bither, former attorney of the Chicago board of education, by the Chicago Bar Association. It is alleged that Bither opened negotiations for purchase by the board of education of a large number of pieces of property shortly after his appointment as attorney in July, 1919.

—Torrence O. Wenning, formerly president of the Clarksville, Ky., school board, has been vindicated by the state board of accounts of charges involving the illegal expenditure of school funds. It appears charges were made by the Clarksville school board following a clash with the board of trustees over an expenditure of \$5,000 for school improvements.

—The school board of South Bend, Ind., has adopted a schedule of tuition for out-of-town students. The scale is as follows: High school, \$120; junior high school, \$80; vocational school, \$135; elementary, \$60, and kindergarten, \$50.

—Syracuse, N. Y. The board of contract and supply has ignored the recommendations of the local board of education and has awarded a contract to an out-of-town concern for \$500 worth of supplies for the schools. The school board had previously recommended that the order be split up and orders for different kinds of supplies awarded to low bidders on the items. The city officials charged the school board with being technical and requiring too much unnecessary work for the purpose of economy.

—Owensboro, Ky. Catholic nuns recommended by sub-district trustees may be appointed as teachers in the schools of Knottsville,

St. Lawrence and St. Joseph districts, it has been announced, following a decision of the Daviess County board of education to employ them. The decision followed the dismissal of a suit seeking to compel the board to establish a school and to employ nuns. The suit was dismissed, it is stated, to avoid a religious controversy.

—O. F. Larson, a school building contractor, recently sued the school board of Tacoma, Wash., for failure to pay him the balance of his contract for the construction of the Jason Lee school.

—Commissioner Frank P. Graves of the New York State Education Department has recently rendered a decision sustaining the appeal of Miss Madeline Kuppler from the refusal of the board of education of Union Free district No. 4 to admit her nephew as a resident pupil, without charge for tuition and to repay the amount demanded by Superintendent Wightman. The commissioner pointed out that though there is a presumption that the residence of a child is the residence of its parents, this may be overcome by proof showing that the parents have surrendered control, and that this control has been taken over by some other person.

—R. W. Cooper, secretary of the board of education of Lansing, Mich., and E. J. Shassberger, another member, have been completely exonerated of any criminal acts in connection with their membership on the board, in a recent report on an investigation of charges filed against the board members by Clarion D. Smith. It was considered obvious from the testimony brought out by the investigation that neither of the parties mentioned in the affidavit had committed any crime, offense, misdemeanor, or violation of any city ordinance. The controversy

was started when a newly elected board member made charges that Mr. Cooper and Mr. Shassberger held their seats on the board illegally.

—Dubuque, Ia. The school board, by a vote of three to two, has voted down a resolution that the board go into executive session only upon rare occasions, and only upon the unanimous consent of the board members. It also voted down by the same vote a motion to go out of executive session.

—Muscatine, Ia. The school board has ordered a complete survey of the Jefferson school, which had recently been declared unsafe and unfit for use by Dean P. C. Packer of the College of Education. In his report to the board, Dean Packer declared the building was a firetrap, in addition to being insanitary and without proper sanitary facilities.

—By a vote of four to one, the Boston school committee recently rejected a proposal of Committeeman Edward M. Sullivan to require that teachers and other employees of the school board be legal residents of Boston. Mr. Sullivan alone voted for the measure, against which Supt. J. E. Burke joined the four remaining members in taking a stand. The latter pointed out that the slogan "Boston schools for Boston teachers" was misleading as the schools are not for teachers, resident or non-resident, but for the children.

—At the request of the mayor, the board of education of Detroit, Michigan, took the census of the city. The population was fixed at 1,242,044. The census revealed that among the foreign born, the Poles led with 115,099. Also, that there were 44,888 men and 39,636 women who were not citizens. The number of pupils in the public schools is 183,638.



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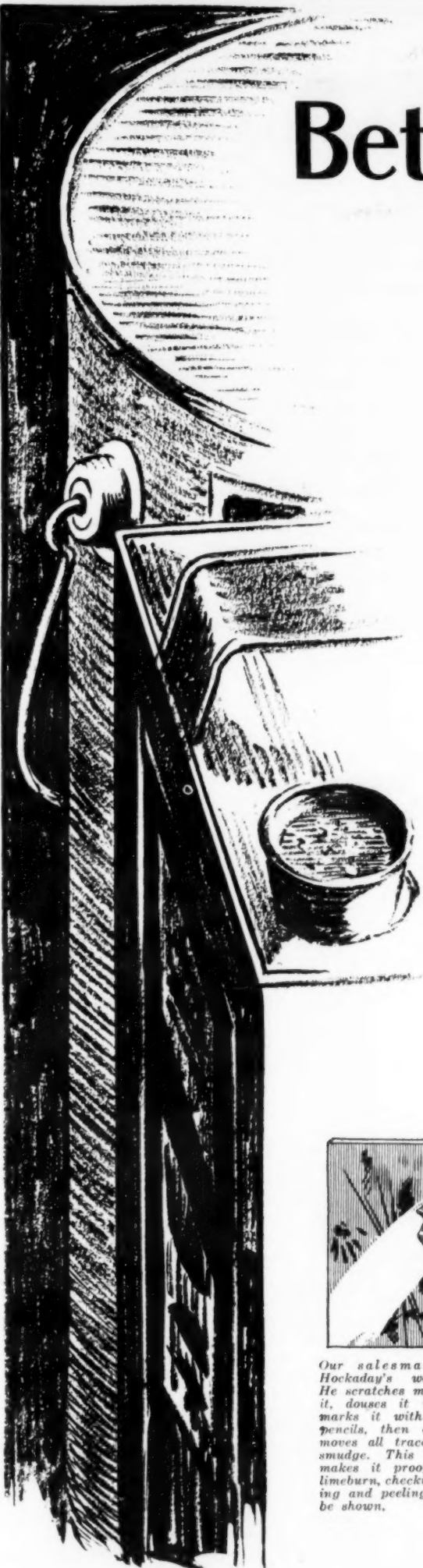
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## BUILDING NEWS OF THE SCHOOLS

### BUILDING NEEDS FOR CHICAGO SCHOOLS

Mr. Homer Davis, director of the Chicago Bureau of Building Survey, writing in the Chicago Schools Journal, discusses the preparation of a building program for the city schools. Mr. Davis emphasizes two major points in the program, namely, the placement of buildings, and the development of plans. For the first time in the history of the city there has been instituted a definite policy for guidance in the erection of buildings. This step has been taken as a result of the rapid rising of shortage in school accommodations, which for the second semester of the school year 1924-1925 approximated 1,650 recitation units. This amounts to 55 thirty-room school buildings. A second reason for the new policy is the constant building of small school units, which in the long run, are found to be more expensive and less efficient than a school of average or larger size.

The plan of placement as defined in a recent survey report, and adopted by the superintendent of schools as a basis for recommending new sites and buildings, is as follows:

1. Standards set up for each type of schools, elementary, junior high and senior high schools, based on maximum traveling distance, standard traveling distance, and standard contributing area.
2. Typical floor plans for buildings which can be expanded from an initial unit to the maximum to be expected.
3. A tentative placement of schools was developed by applying these standards to the territory now within the city boundaries. Due consideration is given to the presence of natural barriers, traffic barriers, and zoning ordinance requirements.
4. The city is divided into 29 tabulation districts. For each of these a careful statement of the present accommodations, room shortage, past, recent and prospective growth, and a suggested plan for immediate relief has been prepared.

Using the above standards, and guided by the priority of needs, Supt. William McAndrew has made recommendations for 45 new school buildings varying in size from 600 to 3,500 seating capacity. This variation is occasioned by the type and location of a building. To carry out the program and plan, 27 new sites have been recommended.

Continuous study is being made of the needs and growth of every portion of the city and a continuous series of recommendations to provide for continuous growth in population is a matter of good business.

It is believed that adherence to the new plan, with provision of funds for buildings, will eliminate the use of portables which are recognized as a poor makeshift and an acknowledgment of lack of care and foresight. It is possible for the city to have the best school plant within a period of ten years and to have it paid for if a definite, comprehensive, and business-like policy is maintained.

### BUILDING NEWS

—Cairo, Ill. The Clendenen High School, which will be occupied in January, will afford relief from crowded conditions in the schools. The old high school will be turned into a junior high school which will take care of 325 seventh, and eighth grade pupils. When the Summer high and junior high school move into the new building, grades six and seven from three schools will be assembled at the present Summer High School as a departmental school. This offers considerable relief in the three grade schools from which these students come.

—Waycross, Ga. An addition to the high school was completed on November 15th. Two further buildings for the grammar grades are to be completed ready for occupancy with the opening of the second semester. The completion of these structures adds considerably to the value of the school plant and relieves the crowded conditions which had previously existed.

—Alton, Ill. Construction work has been begun on a senior high school to accommodate 1,200 students. This is the first step of a building program to be followed by the remodeling of an old building for junior high school

purposes. The present high school will also be used for a junior high school.

—Joliet, Ill. An addition has been built to the Farragut Junior High School. The building is the second unit of a structure to cost \$200,000.

—Normal, Ill. Plans have been outlined for a publicity campaign looking toward a bond issue for a new school building. The rapid growth of the city and the increasing enrollment of students have rendered the present building inadequate for school purposes.

—Kellogg, Ida. An addition to the Union High School has recently been completed at a cost of \$30,000. The addition connects the grade school and the old high school building and offers additional study hall and classroom accommodations, in addition to a large basement room for play purposes and special programs.

—Danville, Va., recently passed a large bond issue by a large majority. Mr. Wm. B. Ittner, of St. Louis, Mo., has been employed to assist in the planning of the new building.

—The citizens of Shaker Heights, O., on November 3rd, voted on a proposition to issue \$1,250,000 for building three new schools and the purchase of sites for others.

—Alexandria, Ind. A high school, costing \$88,000, was dedicated on October 18th. Mr. A. L. Trester gave the principal address.

—Philadelphia, Pa. The school board has adopted a resolution providing that a permanent loan of five million dollars be authorized, the same to be appropriated to the purchase of sites and the erection of buildings.

—Governor John Hammill delivered the dedicatory address at the formal opening of the new \$110,600 high school building at Hamburg, Ia.

—The new Greenfield high school at Greenfield, Ia., costing \$135,000, has been completed and occupied for the first time.

—Supt. Eli Rapp of Berks County, Pa., in his report to the state education department, calls attention to the fact that Berks County is a pioneer in consolidation. Not a single one-room school building has been erected in the county in the last twelve years, and 92 school buildings have been abandoned.

(Continued on Page 94)



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## Chicago's Unique Salary Campaign

Don C. Rogers, Ph.D., Special Secretary of the Chicago Principals' Club

In the past, teacher salary campaigns in Chicago have been perennial and nerve-wracking. Each year near the close of its budget-making period, the finance committee of the board of education has regularly set aside a day for hearings on salary askings. This has been nicknamed "Field Day" by school folk. Representatives of the forty to fifty teaching and labor organizations within the employ of the school board have made earnest but futile pleas for their own special groups from ten o'clock in the morning until six at night. The close of the long day of hectic hearings has left the school board members tired and bewildered. As a result of the mess of salary requests in 1924, the school board asked that next year the Superintendent bring in a salary recommendation of his own, correlating the needs of all the various groups into one scientific salary schedule.

This was done. Superintendent McAndrew had recently arrived in Chicago. He appointed a "Committee of Eighty-three" to collect information on all phases of the salary question. This committee held many meetings individually and with the Superintendent, it gathered statistics covering a period of years, and, at the conclusion of several months' labor, it made a final report to the Superintendent. From these data the Superintendent framed a comprehensive salary schedule which he sent to the board of education in February, 1925, with his recommendation for its passage. Following are the principal schedules included in it:

in their news columns, and four of them endorsed it enthusiastically in their editorial columns. The Association of Commerce endorsed it and urged its passage. On April 27 it was adopted by the school board by a vote of eight "Aye" and one "Pass."

In the week which followed, the mayor made his long-delayed appointments of six new school board members. One of the old board members whose term had not expired had previously voted "Aye" in order to be eligible to move a reconsideration when the new Board came in. At their first meeting they were confronted with a motion to reconsider the salary schedule. The motion carried six to five and the schedule was sent to the Finance Committee where it has lain dormant ever since, while the new Board members study it. All of the new Board members have individually expressed their belief in the justice of the salary raise, but have doubted the financial ability of the school system to put it into operation.

A general survey of the school finances in Chicago has thereupon resulted. The Chicago Principals' Club has collected and interpreted a mass of significant data bearing on all aspects of the school finance situation. The following data have been selected from finance articles appearing in its monthly publication—The Principals' Club Reporter.

1. The Need of the New Salary Schedule. (A self-explanatory sample illustration of which is the accompanying graph.)

TABLE 1.  
Chicago Salary Schedules  
Teachers

Year of Service	—Elementary—		—Junior High—		—Senior High—	
	New	Old	New	Old	New	Old
1	\$1500	(\$1500)	\$1800	(\$1800)	\$2000	(\$2000)
2	1550	(1625)	1900	(2000)	2100	(2200)
3	1600	(1750)	2000	(2200)	2200	(2400)
4	1800	(1875)	2200	(2400)	2450	(2600)
5	2000	(2000)	2400	(2550)	2700	(2800)
6	2250	(2125)	2700	(2700)	3100	(3000)
7	2500	(2250)	3000	(2850)	3500	(3200)
8	2750	(2375)	3300	(3000)	3900	(3400)
9	3000	(2500)	3700	(3150)	4300	(3600)
10	3250	(2500)	4100	(3300)	4700	(3800)

No one now teaching shall by operation of the new schedule suffer diminution of salary but shall continue to advance on the old salary schedule, including bonuses, until he reaches a year in which his salary under the old schedule is less than it would be under the new schedule, at which time he shall pass automatically to the new schedule.

Principals

Year of Service	—Elementary—		—Junior High—		—Senior High—	
	New	Old	New	Old	New	Old
1	\$4000	(\$3000)	\$4250	(\$3600)	\$5000	(\$4300)
2	4250	(3200)	4500	(3800)	5500	(4500)
3	4500	(3400)	4750	(4000)	6000	(4700)
4	4750	(3600)	5000	(4200)	6500	(4900)
5	5000	(3800)	5250	(4400)	7000	(5100)
6	5250	(4000)	5500	(4600)	7500	(5300)
7	5500	(4200)	5750	(4800)	7500	(5500)
8	5750	(4400)	6000	(5000)	7500-(2)	(5700)
9	6000	(4600)	6250	(5200)		
10	6250-(1)	(4800)	6500	(5400)		

(1) Maximum goes one step farther, to \$6,500, for elementary principals with schools of 50 or more teachers.  
(2) Maximum stops at \$7,000 for high school principals with less than 100 teachers.

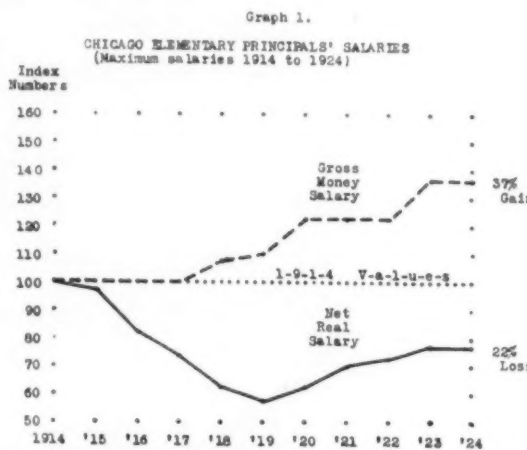
It was a strange phenomenon for Chicago school people to see the Superintendent of Schools get in the harness and actually take the lead for salary adjustments. A few quotations from Superintendent McAndrew's various reports to the Board show the sincerity and wholeheartedness with which he urged the passage of the salary schedule.

"By law your Board is charged with the duty of providing adequate education for the community. There is no evidence that your community is satisfied with an educational system inferior to the best in any American city. It seems to me a plain duty to establish by better salaries a better system of schools."

"Teachers are in no position to bargain for prices. There is no competition. The possibility of increasing one's income in free competition is impossible in a public school system. It is governmental monopoly."

"The Discrimination Against Teaching. We have paid carpenters, plasterers, bricklayers, repairers, the makers of all kinds of supplies, increases of from 110% to 120% in the number of dollars which not only covers depreciation of money value but gives greater actual value than in 1914. The main business of the Board is not carpentry, building, nor supplies, but teaching. What we have done is to adjust the wages of those doing the supplementary work. We are now in the position of refusing to correct the wages of those who do the essential work of the Board. This is offering our customers a more expensive barrel while debasing the quality of the flour."

Considerable discussion followed the presentation of this schedule to the board of education. Five leading newspapers played it up favorably



Gross Money Salary is the amount of salary—in dollars.

Net Real Salary is the value of the salary in purchasing power. (Note that no time since 1914, despite some gross increases, has the net salary equalled its 1914 worth. The cumulative loss to each principal is over \$8,000 for the decade.)

2. Chicago is not giving its schools adequate financial support.

TABLE 2.  
ILLINOIS COMPARED WITH THE OTHER  
ELEVEN STATES IN THE MIDDLE WEST

A. Illinois is First in per capita Income.	
State	Rank
ILLINOIS	1st
Iowa	2nd
Michigan	3rd
Nebraska	4th
Ohio	5th
South Dakota	6th
Kansas	7th
Indiana	8th
Minnesota	9th

Wisconsin	10th
Missouri	11th
North Dakota	12th

Note: Illinois is better able than its neighbors to support schools adequately—it can afford it.

Illinois is the third wealthiest state in the Union. (Data from p. 28, "Financial Statistics of Public Education in the United States"—Newcomer, Volume VI of the Educational Finance Inquiry.)

B. Illinois is Eleventh in per Capita Expenditures for Education.

State	Rank	Amount
North Dakota	1st	\$22.51
South Dakota	2nd	19.63
Minnesota	3rd	17.67
Indiana	4th	17.16
Iowa	5th	16.83
Nebraska	6th	16.05
Kansas	7th	14.89
Michigan	8th	14.57
Ohio	9th	12.44
Wisconsin	10th	12.12
ILLINOIS	11th	11.43
Missouri	12th	9.02

Note: Illinois burdens itself less than any other state in the Middle West, except Missouri, in support of its schools.

(Data from p. 25, *ibid.*)

C. Illinois is Second in per capita Expenditures on Highways.

State	Rank	Per Cent
Wisconsin	1st	29.6
ILLINOIS	2nd	24.1
Iowa	3rd	23.8
Minnesota	4th	23.7
North Dakota	5th	20.6
Indiana	6th	17.0
South Dakota	7th	16.2
Missouri	8th	15.6
Kansas	9th	15.2
Michigan	10th	14.6
Nebraska	11th	11.0
Ohio	12th	9.9

Note: Judging by the reversed rank shown in Tables 2 and 3, it might almost seem that Illinois is more concerned with roads than schools.

Since these figures were compiled, Illinois has voted the \$100,000,000 road bond proposition.

(Data from p. 16, *ibid.*)

D. Illinois is Eighth in Efficiency of its Schools.

State	Rank
Iowa	1st
Michigan	2nd
Ohio	3rd
North Dakota	4th
Indiana	5th
Minnesota	6th
Nebraska	7th
ILLINOIS	8th
Kansas	9th
South Dakota	10th
Wisconsin	11th
Missouri	12th

Note: It is to Illinois' credit, that despite the fact that it ranks 11th in financial support of its schools, it ranks 8th in efficiency of its schools.

But is 8th high enough? Illinois ranks only 24th in efficiency among the 48 states and the District of Columbia.

(The efficiency index is based on ten criteria, such as (1) per cent of population of school age actually attending, (2) holding power, i. e., how well the schools hold the children through the upper grades and high school, etc., etc.)

(Data from p. 47 of "An Index Number for State School Systems," by L. P. Ayres—a Russell Sage Foundation publication.)

TABLE 3.  
CHICAGO COMPARED WITH FIFTEEN OTHER  
CITIES OF ITS CLASS

(All cities in U.S. with 400,000 population or more are listed.)

A. Per Pupil Expenditures on Instruction.	
City	Per Pupil Cost
Buffalo, N. Y.	\$96.34
Newark, N. J.	88.46
Los Angeles, Cal.	88.41
Detroit, Mich.	86.33
New York, N. Y.	82.14
Cincinnati, Ohio	80.79
Cleveland, Ohio	79.22
Pittsburgh, Pa.	78.45
Washington, D. C.	78.21
San Francisco, Cal.	77.15
Boston, Mass.	75.62
Milwaukee, Wis.	75.06
CHICAGO	71.86
Philadelphia, Pa.	68.91
St. Louis, Mo.	68.10
Baltimore, Md.	(not given)
Average	\$79.67

Note: Chicago is much below the average.

(Data on per pupil costs are taken from "Per Capita Costs in City Schools, 1923-24," March, 1925, Statistical Circular No. 4, U. S. Bureau of Education, except that the New York data are taken from its own annual report, and the Cleveland, Cincinnati and Detroit data are taken from the January-March, 1924, Research Bulletin of the N. E. A.)

B. Per Capita (population) Expenditures on Education.

City	Per Capita Cost
Boston, Mass.	\$16.18
New York, N. Y.	15.98
Newark, N. J.	15.66
Cleveland, Ohio	15.05
Cincinnati, Ohio	14.66
Los Angeles, Cal.	14.63
Pittsburgh, Pa.	13.79
Buffalo, N. Y.	13.52
Detroit, Mich.	12.75
Washington, D. C.	12.40
Milwaukee, Wis.	12.08
CHICAGO	11.66
Philadelphia, Pa.	10.50
St. Louis, Mo.	9.84
San Francisco, Cal.	8.81
Baltimore, Md.	8.44
Average	\$12.87

Note: If Chicago spent as much per capita on education as New York, there would be about \$13,000,000 more money spent annually.

If Chicago spent as much per capita as the average of these cities, there would be about \$3,500,000 more money spent annually.

(Concluded on Page 93)



## Clow is Moving Into the World's Largest Plumbing Plant



**D**URING the month of December, James B. Clow & Sons moves into its commodious new quarters at Lake, Talman and Fulton Streets, Chicago—the largest plumbing plant in the world.

Three large buildings, modern and roomy have been specially fitted for the efficient carrying on of Clow's plumbing business. The total length of the entire plant is 724 feet—width is 147 feet—total ground floor space is over 80,000 square feet.

Storage and shipping facilities are beyond parallel. For example, the capacity of the new steel and wrought iron pipe warehouse is 3500 tons. The switch track accommodates ten cars. And, twelve trucks can be loaded simultaneously.

With these, and the many other facilities that the new plant affords, the Clow organization hopes to make even better the service which has been synonymous with the name Clow for the past forty-eight years.

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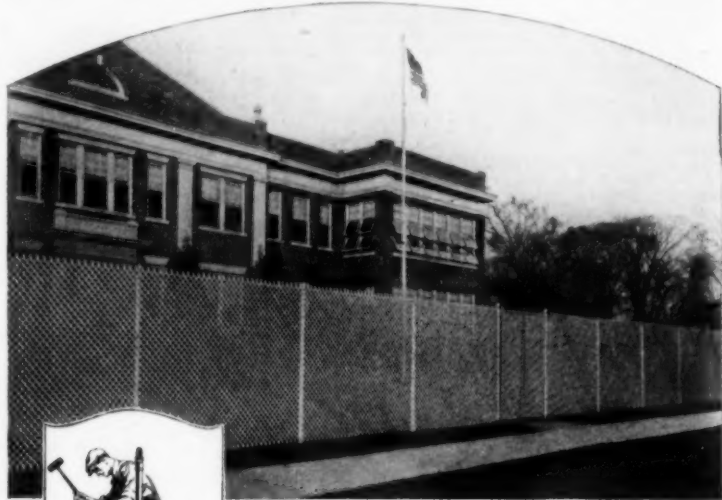
By far the greater number of window shades in use today are mounted on Hartshorn Rollers. Sixty years ago Stewart Hartshorn's invention made possible the modern window shade. His principle was the right one—as applied in the modern Hartshorn Roller today it assures the smooth, quiet glide that you desire.

Don't take "just as good" substitutes for the Hartshorn Roller. And specify Hartshorn Shade Cloths, too. They are correct for the school-room in every detail. Hartshorn's Oswego Tinted Cambric mounted on Hartshorn Roller with No. 86 or No. 87 double brackets is an ideal combination for school-room use.

*WRITE FOR NAME of dealer through whom you may secure Hartshorn shade products and for samples of colors: Sage, Linen, Putty, Dust, Dill, in Tinted Cambric especially adapted for school use. They have been approved by competent chemists.*



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*because anchored*

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This feature of Anchor construction; the use of U-bar posts, with their exceptional strength; and a chain link fabric of rust-resisting copper-steel wire, Galvanized *After Weaving*; all go to make up a fence which will give years of service with very little or no maintenance expense.

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This new book is a very handy one to keep on file. A copy will be sent to you upon request without charge or obligation. We sell Paints, Enamels, Varnishes, Roof Cements and Cleaning Compounds direct to public and private schools.

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☐ Tocotone, flat wall finish      ☐ Floorkote, for cement floors

Name..... Title.....

School.....

City..... State.....

11-25

(Concluded from Page 90)

(Data on per capita costs are taken from "Financial Statistics of Cities, 1922," Table 7, pages 200-300, U. S. Bureau of the Census.)

3. The New Salary Schedule can be financed by a tax levy increase. Chicago is underburdened, but the schools are in dire financial straits because there is a maximum levy rate (already reached) beyond which the Board may not levy unless a referendum authorizes a higher rate, and, coupled with that fact, there is so low an assessment rate on Chicago property that even the maximum levy will not raise sufficient funds to run the schools.

The school board must secure a tax levy increase under the referendum clause of the Otis school law. The tax levy increase is absolutely necessary if the schools are to continue to run. This is true whether the new salary schedule is granted or not. Chicago is growing. The population has now reached the 3,000,000 mark. Eighteen thousand more children enter school every year. "Seventy-five more children enrolled in school since yesterday," has been the daily average for the past ten years. Present revenues are inadequate for the increasing school costs.

Under the Otis law the educational fund tax levy may be increased from \$1.92 per \$100 of assessed valuation to \$2.92, if the voters authorize it. Most Illinois cities have secured this extra dollar long since. Chicago may vote on this next April.

4. The alternative to a tax levy increase is a raise in property assessments. This seems unfeasible. Experience has shown that if the teachers' salary increase is put off until the assessments are raised to a scale adequate to finance the schools, ere that happens the entire present teaching force will long since have passed beyond. In fact, one of the present members of the Cook County Board of Assessors rode into office at the last election on the platform promise of keeping assessments low. Furthermore, many people question the wisdom of that method as against a levy increase. If assessments are raised in order to permit adequate tax funds for the schools, it also automatically permits an increase in funds for the city, county, state and nation, for park boards, for forest preserves, for sanitary districts, for library and for the rest of the thirty-eight tax-

ing bodies, even though many or all of them may not need additional funds. A tax levy rate increase for the schools, on the other hand, increases the funds for the schools only, a relatively small burden.

In conclusion, it should be pointed out that one of the most unique features of this salary campaign is that the teachers have been reputed to be opposed to the schedule. In fact, the Chicago newspapers under date of September 5, carried a story about a delegation, which, purporting to represent 11,000 Chicago teachers, visited the mayor and made a protest against the adoption of the Superintendent's salary schedule. The delegation was headed by the Business Agent of one of the teachers' organizations. In an effort to determine whether the teachers actually were opposed to the schedule, the president of the Principals' Club decided to conduct a city-wide secret poll of all teachers. This was done on September 24th.

No poll could have been fairer. The utmost secrecy was maintained in the balloting. The results were as follows:

#### RESULTS OF THE CITY-WIDE POLL OF TEACHERS

235 elementary schools .....				
17 senior high schools .....				
5 junior high schools .....				
	Number of Teachers		Per cent of Teachers	
	For	Against	For	Against
.....	3310	2887	53%	47%
.....	940	222	81%	19%
.....	102	16	86%	14%

Eleven per cent of the elementary, three per cent of the junior high, and eight per cent of the senior high school teachers did not vote.

These figures show that anyone who purports to be speaking for the Chicago teachers does not speak in their behalf if he or she argues against Superintendent McAndrew's salary schedule. Even among the elementary teachers, where the vote was closest, such person would be representing the wishes of a minority only.

#### NEWS OF SCHOOL OFFICIALS

—Mr. Q. L. Garrett has been elected president of the board of education at Waycross, Ga., succeeding J. W. Bennett. Mr. Garrett came to the city as principal of the high school, which position he held for three years, resign-

ing at that time to enter the law school. Mr. Bennett, the retiring official, was a member of the board for 23 years and still retains his membership in that body. His long experience and business ability have made his counsel and assistance very valuable in the successful operation of the school system.

—Mr. Bert A. Reed, newly elected member of the school board at Coeur d'Alene, Ida., has been elected as president for the ensuing year.

—Mr. H. H. Braden, formerly on the faculty of the Sandpoint, Ida., high school, has been appointed secretary of the board of trustees, succeeding W. S. Finney resigned. Mr. Allen P. Asher has been elected to the board to succeed himself, and Mr. Karl D. Greef has been elected to succeed Dr. J. H. Phinney.

—Col. W. H. Connor has been elected to fill the vacancy on the board of education at Griffin, Ga. The officers of the board are Mr. L. P. Goodrich, president, and Mr. E. P. Bridges, treasurer.

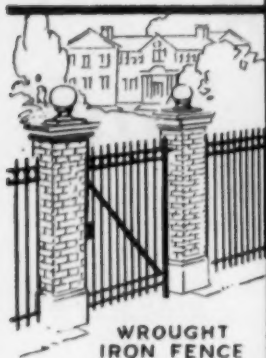
—Mrs. T. D. Hall is the first woman to be elected to the school board at Alexandria, Ind. Mrs. Hall is at present serving as president of that body.

—Mr. Arthur E. Eggert, deputy commissioner of education of St. Paul, since 1920, has resigned to become city purchasing agent. Mr. Eggert has been succeeded by Mr. G. L. Springer.

—Announcement has been made of the death of Dr. O. J. Johnson, formerly assistant director of research of the St. Paul city schools. Dr. Johnson's researches added many additional proofs of the fact that the rate of a child's mental growth is not always in agreement with his increase in age. Intensely interested in the problems of child guidance, he sought an adjustment of the pupil's work that would both prevent discouragement and inspire greater effort. He was intensely interested in the development of the means of determining a child's best placement in school, and under his direction, a plan was inaugurated for providing classes for gifted pupils in order that they might pursue an enriched course of study.



## SCHOOL



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## FENCES

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FENCES  
PRODUCT PLUS SERVICE



ENCLOSURES

## SCHOOL BUILDING NEWS

(Continued from Page 89)

—Derry Township School District, in Pennsylvania, occupied its new high school building this fall. The school represents a complete consolidation of all the schools of the township, and was presented by Mr. M. S. Hershey, the chocolate manufacturer. It is completely equipped for modern school purposes, including an auditorium and a cafeteria.

—The new school at Sodus, N. Y., erected at a cost of \$225,000, was opened for use on September 14th.

—Olean, N. Y. Propositions to enlarge and improve the schools at Olean were carried by large majorities at a recent election. The propositions called for the issuance of bonds for \$195,000, of which \$145,000 is for the enlargement of the site for school No. 7 and the construction of a twelve-room addition to the board, and \$50,000 for the erection of a unit housing four classrooms and a combination physical training room and assembly hall.

—Hastings-on-Hudson, N. Y., on September 15th, approved the expenditure of \$325,000 for a new school building.

—The Hughes School at Utica, N. Y., was opened on September 9th. Erected at a cost of \$665,000, the new structure will accommodate 1,320 pupils.

—An additional appropriation of \$50,000 for a new high school at Baldwin, N. Y., has been unanimously voted by the taxpayers. The building is being erected at a cost of \$500,000 on a site which cost \$34,750.

—A high school building was recently occupied at Granville, O. The building is of fireproof construction throughout, with Groveport wire, cut, variegated colored brick and Indiana limestone trimming. The building is three stories high, with a sub-basement, and contains eleven classrooms, two science laboratories, two rest rooms, three office rooms, a cafeteria and kitchen, home economics rooms, auditorium, gymnasium, and study hall.

The building was planned and erected under the supervision of the Frank L. Packard Co., of Columbus, O., and the construction work was done by the S. J. Isabell Company.

—A recent statement alleging that new schools just completed in New York City, and others now in course of construction, are defective in construction has been termed unfounded criticism, made without the authority of the school building department. It is declared that to visit numerous schools and to report all kinds of faults and weaknesses in construction, without giving the names or standing of the men responsible for the reports, is a cheap kind of propaganda.

Architect William H. Gompert, of the school building department, has offered to prove that the criticisms are unfounded by taking an unbiased committee of building experts on a tour of inspection of the schools. As Mr. Gompert states, the concerns whose reputations have been impugned are so numerous and representative that the attack places in question the integrity of the entire building industry in New York City.

—Columbus, Ga. A new high school is in course of construction and will be completed ready for use by the fall of 1926. The building was planned and erected by Architects Starrett & Van Vleck, New York City, and cost for building, site, and equipment a total of \$400,000. A one-story school for negro pupils has been completed and occupied.

The board of education recently appointed a special committee to make a survey of the physical properties of the schools, and to work out a five-year program for buildings and extensions.

—Carterville, Ill. A playroom or small gymnasium has been erected. The building is 34 feet by 17 feet and offers a comfortable place to play in bad weather.

—Buffalo, N. Y., has voted \$215,000 for a new school for crippled children. Buffalo is one of nine cities in the state making provision for the education of crippled children. It is reported that since March, 1924, fifty boys and girls handicapped by physical defects, have received training in school subjects ranging from kindergarten to high school.

Literally tracking an opinion from the state fire marshal that school auditoriums should be constructed on the ground floor with no base-

ments underneath them, city fire officials of San Antonio, Texas, in conference recently, decided that the board of education may not build the auditorium of the South Side Junior School over the cafeteria.

The controversy over the South Side Junior School building arose when city fire officials learned that the school board was contemplating building the new junior school with an auditorium over the cafeteria. The building will cost about \$250,000, and will provide for about 1,000 pupils.

The action on the part of the city fire officials was taken after City Attorney Joseph Ryan said that the matter of how the auditorium of the new school shall be built was one to be decided by fire officials. Previously it had been referred to him, and he declined to give an opinion. However, he advised Police Commissioner Phil Wright of correspondence received from the state fire marshal. This opinion said in part:

"The auditorium hazard in public schools is one which is causing my department serious worry, and we recommend that where an auditorium is used it should be on the ground floor with sufficient exits to empty the building rapidly in case of fire, and no basement should be permitted under the same."

—Berwyn, Ill. A new eight-room grade school has been completed and occupied. The building is intended for pupils of the seventh and eighth grades and the work is organized on the departmental plan. It is entirely fireproof and is equipped with the most modern systems of heating, ventilation and sanitation.

In addition to the opening of this new building, all existing buildings were painted and thoroughly renovated during the summer vacation.

—San Francisco, Calif. The school board has adopted a policy in school architecture, under which the remaining units of the \$12,000,000 rehabilitation program will be constructed. According to the San Francisco Chronicle, "Architect John Reid, Jr., has been instructed to aim at a composite architectural plan for future buildings which will combine the best features of designated buildings. All buildings

(Continued on Page 97)



## Sight Conservation in the Schools

**M**UCH thought is devoted nowadays to the urgent problem of protecting children's sight. It is realized that deficient eyesight is a severe handicap in the child's efforts towards education. The endeavor is therefore twofold. First, to place on as equal a footing as possible with his schoolmates of sound vision, the child whose eyesight is defective. Second, to preserve to those children whose vision is normal this precious asset, through hygienic school conditions such as adequate light and pure air.

A vital part of sight conservation concerns the blackboard work which takes up so much of the pupil's time. Especially during the winter months, with shorter days and a greater amount of work under artificial light, those crayons which make the clearest marks cause the smallest strain on the eyes—particularly for the child in the back seat.

For this reason GOLD MEDAL Blackboard Crayons and Lecturers' Chalks are to be preferred, because of their bright color and distinct line—the result of the use of purest ingredients and the utmost care in making.



For every phase  
of art instruction  
there is the proper  
GOLD MEDAL  
Product.

**BINNEY & SMITH Co.**  
41 East 42<sup>nd</sup> Street New York, N. Y.

(Continued from Page 94)

will in the future be located in quiet academic neighborhoods."

—Merits of the financial and building programs of the Indianapolis public schools, looking to the complete rehabilitation of the school plant, were recently outlined by Mr. Charles R. Yoke, president of the school board, in a speech before the employees of a local industry. Mr. Yoke told how a policy was adopted a year ago for setting up coordinating financial and building programs for the city schools, to overcome the unfavorable situation in school buildings, accommodations and financial affairs. The financial program will include the adoption of a budget and an improvement of the method of handling finances.

—The Summit school, near Chattanooga, Tenn., has been erected with the aid of funds provided by the Rosenwald Fund.

—Springfield, Mass. Repeated complaints of delay and extravagance in the building of schoolhouses have resulted in a plan of regulation, giving the school board complete control of, and responsibility for, all school construction. The plan is being supported by school board members and by members of the city government and is looked upon favorably by the citizens. It was pointed out that in one instance, a new building had been held up from March until October, because the mayor had failed to give his approval promptly.

—Chicago, Ill. A step toward the relief of the classroom shortage in the public schools has been indicated in a recent report on building progress, issued by John E. Byrnes, business manager of the board of education. The report was compiled by John C. Christensen, head of the bureau of architecture, and shows that five new buildings have been completed since September 1st, with 22 more in progress in different parts of the city. A total of 26 new schools have been completed during the year, with a total seating capacity of 20,930.

Contracts have been let for three more buildings, the John D. Shoop, the Sullivan and an unnamed elementary school. Bids have also been received for the erection of two senior high schools, the Calumet and the Fenger. More elaborate than either of these schools will be the Roosevelt combination junior and senior

high school building, for which bids will be received in December. Plans are also in progress for two other junior high schools, to be erected in 1926. Among the new elementary schools to be completed before the close of 1925 are the Cook, the O'Keeffe, the Edwards, and the Ruggles.

The summary report includes thirty buildings, covering both complete structures and additions to buildings.

—Cleveland, O. As a preliminary to the floating of a bond issue, the school board has adopted standard building plans which are expected to reduce by \$50,000 the cost of each new elementary school. The plans represent nearly three years of work on the part of Mr. George M. Hopkinson, school architect, and Mr. W. R. McCornack, his predecessor.

The plans call for buildings of either two or three stories, but the two-story buildings may be expanded to three stories when the enrollment demands more space. It is estimated that architects' costs, salaries of draftsmen and other incidentals may be saved.

While the buildings erected under this plan will be identical in dimensions and in interior arrangements, each will have varying exterior ornamental effects. The buildings will be T shaped, with the stem of the T housing an auditorium on the first floor, and a gymnasium on the second. There will be no basement aside from the space reserved for the heating plant.

—Indianapolis, Ind. The school board has authorized a temporary loan of \$800,000 from the proceeds of a bond issue for the construction of the Washington and Jefferson high schools. It is expected that the total amount of the money for the construction of the two high schools will not be needed at once, and that the \$233,267 left of the bond issue will be sufficient to carry on the work until the final tax settlement is made.

—Louisville, Ky. The school board has adopted ordinances authorizing the citizens to vote on a \$5,000,000 bond issue for the improvement of the city schools.

The need of additional school accommodations is supported by actual figures submitted by Supt. B. W. Hartley. With an increased city population of thirty per cent, the schools have had an increase of 39 per cent in enrollment,

within a period of ten or twelve years. The high school enrollment has had the largest increase, the figures being a 97 per cent increase in high school attendance. It is further pointed out that a considerable number of the school buildings are over sixty years old, and more than twenty are over fifty years old, while 110 portables are necessary to accommodate the overflow enrollment. In addition, thirty-eight basement rooms are in use, making a total of 5,000 children housed in unsuitable rooms.

—The one-room school building in Indiana is fast disappearing, according to members of the state board of education. Consolidated schools have gradually taken the places of the one, two, and three-room schools. As rapidly as money is available, large and modern buildings have been constructed in every part of the state. At the present time there are slightly more than 4,000 of these one-room schools in the state.

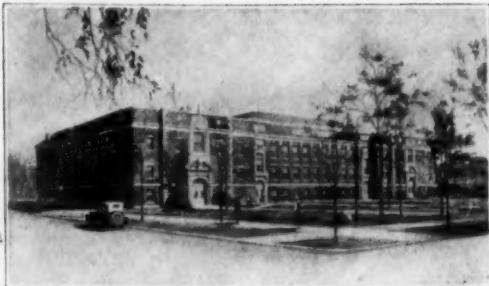
—Knoxville, Tenn. Mr. William B. Ittner, of St. Louis, Mo., has been named as supervising architect for the school building program to be carried out by the school board. Three local firms, Graf & Sons, Barber & McMurray, and Baumann & Son, were also named to carry out the first phase of the construction work.

—Milwaukee, Wis. A financial statement explaining the needs of the city schools, the reasons for requests in the budget, and causes for the increase in costs, has been issued by the school board. Discussing the request for \$2,100,000 for school buildings and sites, the statement includes figures showing that within \$100,000 of the \$2,341,790 available in September, 1925, is covered by work now under way or to be begun this year. Additional buildings will be begun with funds provided for 1926 aggregate \$2,190,000. In addition to this, buildings amounting to \$1,000,000 are urgently needed.

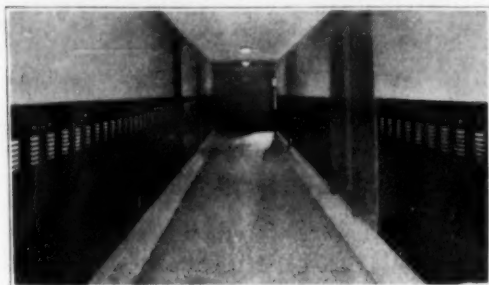
A list of contracts outstanding, amounting to \$830,609, is presented, with sites now under condemnation amounting to \$247,000. Three new buildings will be begun before the end of the present year.

The existing shortage of seats is fixed at 6,100, with 1,300 in the high schools. The school housing problem, it is pointed out, is increased by the annexed territory, as such territory is usually deficient in school accommodations.

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Left to right: Community High School, Staunton, Ill.; Township High School, Streator, Ill.; Horatio G. Bent School, Bloomington, Ill.  
Lower: Second floor corridor, Township High School, Streator, Ill.

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The increase in the school maintenance fund of 185 per cent is given as 112 per cent for higher costs, 70 per cent for expansion, and three per cent for added activities, summer and night schools. Fuel cost has increased 75 per cent, janitorial costs 95 per cent, and teachers' salaries 119 per cent.

—Spring City, Pa. The defeat of the school board's plan to borrow \$99,000 for the erection of a high school building has left the city school system in a serious position. The borough is badly in need of more school facilities and has a site for a new building which cannot be used.

—Chillicothe, O. An \$800,000 bond issue and school building program for the city schools has been approved by the local chamber of commerce.

—The \$35,000 bond issue of the Watson Chapel (Ark.) school district has been sold. The proceeds of the bond issue will be used in the construction of the Watson Chapel community school.

—Logan, Utah. A bond issue of \$100,000 for high school accommodations met with defeat at a recent bond issue election.

—Fort Worth, Tex. One new school, and additions to two further buildings will be provided with funds obtained from a \$2,000,000 bond issue voted in June last. The new buildings will be completed ready for use in the fall of 1926.

—Detroit, Mich. An audit of the books of the Greenfield school district, which was annexed to Detroit last spring, has been begun as the result of charges made by Dr. John S. Hall, member of the Detroit school board.

Dr. Hall, in his complaint, charged that the residents of the district comprising four families with seven voters, formed a school board among themselves, elected officers, and voted a bond issue of \$200,000 for the purchase of the site and the construction of the school. Two bond issues were authorized, according to the records, the first for \$175,000, and the second for \$10,000.

—New York, N. Y. The school board has approved plans for the construction of two of the new standard J type of schools. School No. 208, Brooklyn, will be the first three-story school building of the type to be erected, while School No. 203 will be a four-story building. The former school will be a fourteen-room building

and will cost \$300,000. The latter will be a 21-room building and will cost \$365,000.

—Detroit, Mich. The immediate erection of three new schools and the discontinuance of further retrenchment in the school building program have been made possible through a legal opinion of the corporation counsel, making available an additional fund of \$1,250,000. The opinion was given upon request of the board of education as to the amount of money available in the appropriations for new buildings, and was prompted by the discovery of an error in the budget.

—Waycross, Ga. Two new schools will be completed late in December. Both buildings are being erected from the same plan.

—Topeka, Kans. The citizens recently voted on a proposition calling for the issuance of \$900,000 in bonds for the construction of school buildings.

—Youngville, Pa. The citizens voted on a proposition to issue \$30,000 in bonds for the erection of a school to replace a building destroyed by fire.

—A new high school being planned for Ozone Park, New York City, has been named the John Adams high school.

—Prospect Park N. J. The voters have been asked to approve the erection of an addition to the school building, at an estimated cost of \$78,000.

—Erie, Pa. The school board has undertaken the purchase of four school sites in outlying districts to care for the school needs ten years hence.

—Middletown, O. The voters have been asked to approve a \$200,000 bond issue for the erection of a new school.

—A new high school was dedicated with appropriate exercises at Gloucester, O., on November 20th.

—Glencoe, Ill. Plans have been completed and a site secured for the new school to be erected in the near future. The new building will relieve the present congestion and take care of future increases in enrollment.

—Indianapolis, Ind. The new \$1,200,000 Shortridge high school will be erected on a site which the board has selected at the intersection of two streets.

—Pleasant Mound, Tex. The school district will vote on a bond issue of \$20,000 for the erection of a new school.

—Childress, Tex. Bids have been received for a new high school to cost approximately \$135,000 at completion. The contract for the building was awarded at the price of \$107,488.

—Dallas, Tex. The East Dallas high school, the largest school of its kind in the city, will be erected early next year. The school will accommodate 3,000 students and will be erected from plans prepared by Architects DeWitt and Lemmon.

—Fort Worth, Tex. The school board has adopted a junior high school building program, involving the erection of four buildings, to cost a little less than a million dollars. Work on the buildings will start about January 15th and will be completed by the following September.

—Bartlesville, Okla. Construction work has started on a new high school. Work on the building has been somewhat delayed by a strike of the carpenter force but this has now been overcome.

—Little Rock, Ark. A contract has been awarded for the erection of a new high school to cost \$60,722. The building will be erected on the site of a former building which had been destroyed by fire.

—San Francisco, Calif. A school building program, consisting of additions to five buildings, and costing about \$1,000,000, will be placed in operation shortly.

—Springfield, Mass. The school board has recommended the erection of a new school to cost \$120,000, and the building of additions to two schools, the total expenditure to reach \$295,000.

—Salt Lake City, Utah. Following a survey made by H. C. Lewis, superintendent of buildings and grounds, the school board has been asked to increase the total amount of insurance carried from \$3,000,000 to \$4,000,000. It is the opinion of the building superintendent that the former amount was not sufficient to cover the replacement value of the buildings at the present time.





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The kind which will last from one end of the year  
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CATALOG ON REQUEST

## SCHOOL FINANCE AND TAXATION

### CAN NORRISTOWN AFFORD MORE?

A survey on the school finance situation of Norristown, Pa., has just been completed by Supt. H. O. Dietrich, in which he answers the question whether Norristown is spending as much for education as it should.

Mr. Dietrich contends that the community needs a domestic science department and a vocational school, and that the financial support accorded is wholly inadequate. He strikes at the basic weakness of the financial system and says: "When we seriously ask ourselves why we do not remedy educational defects, we are forced to admit that it is lack of sufficient school revenue. The reason our revenue is inadequate is because we are tinkering with a worn-out and irremediably defective machine. It cannot be patched; it must be rooted out and planted anew. The criterion of ability has changed from property to produce, yield, earnings, profits, income and so on, and the sooner we realize that, the better for all concerned. The general property tax has been abandoned in every nation except the United States, and has been modified greatly in a number of states in the United States. It is the worst tax known today in the civilized world."

He makes comparisons with Pennsylvania cities of similar size, including York, McKeesport, New Castle, Williamsport, Easton, Hazleton, and shows that Norristown has a per capita school revenue of \$10.26 per pupil revenue of \$65.20 which is considerably lower than that of the cities named. The average is \$76.51. In a comparative statement on property values, Mr. Dietrich also demonstrates that Norristown maintains the lowest tax rate for school purposes.

The weakness of the system of taxation is perhaps best described in the following paragraph: "Property is assessed at a rate often suitable to assessor and owner. The assessor is afraid to raise assessments for fear he will lose his appointment. He feels that he is responsible

to the people who elect him; therefore, pursues the course which will best insure his election. The local assessor system is antiquated and cumbersome. Our local method of assessment is absurd."

Mr. Dietrich concludes his study with the following observation: "I feel that this study has given convincing facts concerning existing conditions, also that the findings are a revelation—answers to many questions. They surely answer for all of us the questions: Why does Norristown not have sufficient revenue to place her schools in the rank of other towns? Can Norristown afford to raise her assessments and provide opportunities to her children which she rightly owes them? Whatever use may be made of these findings, they cannot help but be thought provoking, which in turn, will bring action of some sort. After all, public opinion is the only source through which efficient constructive methods can be brought about. Certainly, only through placing before the people, results of investigations can we expect the people to see the wisdom or folly of certain issues."

### FINANCE AND TAXATION

—The new salary schedule presented to the Chicago board of education by Supt. William McAndrew has been indefinitely postponed. A lack of funds prevents at this time the proposed increase. The question of increasing the tax rate from \$1.92 to \$2.92 will be presented for a referendum vote next April.

—At a meeting of a Wilkes-Barre, Pa., civic association, Louis Frank, a member of the local board of education, stated that the new Memorial high school, costing \$1,000,000, had been erected without one cent of bonded indebtedness. The proposed Carey Avenue high school will also be erected from current taxation.

—The school board of Marion, Ill., at the close of the school year, had decided not to open the schools this year unless a vote was carried for increased taxes. After voting twice during the summer, the proposition was finally carried with a small majority on August third. Preparations for the school year 1925-1926 were immediately started and the schools opened on September 14th.

—The school board of Shaker Heights, O., has issued a bond and interest statement showing the purpose of the bond issue, the denomi-

nation, the amount of the issue, the interest rate and the length of period covered by the bond issue. The board reports a total outstanding bond issue of \$2,139,500. The school district valuation is \$73,000,000, the population of the district is 6,000, and the actual school enrollment is estimated at 1,525.

—Waycross, Ga. The citizens have approved an increase in the millage for school purposes, raising the amount from six to ten mills. The increase provides sufficient money with which to operate the schools upon an efficient basis.

—The school board of Shaker Heights, O., has adopted a budget for the calendar year 1926, providing for a general fund of \$422,000, a teacher retirement fund of \$10,000, and for bonds, interest and sinking fund of \$237,093, making a total of \$669,093.

—The sum of \$131,951 was cut from the budget by the board of education of Seattle, Washington, reducing the tax by 1.44 mills. The Tacoma board of education reduced its budget by \$15,500. The Seattle cut was effected by reducing the salaries of custodians and others. The Tacoma cut means a reduction of \$8,000 in teachers' salaries, \$2,000 in janitors' and engineers', and \$4,000 from auxiliary and miscellaneous accounts.

—The annual school budget of the Cleveland, Ohio, board of education constitutes a large document. Every item of expense is anticipated. The total reaches the sum of \$19,580,000. The income from taxation is \$18,786,355. The balance is secured from state reimbursements for defectives which amounts to \$152,000, interest on deposits \$395,000, income on rent \$39,000, tuition fees \$71,000, etc., etc.

—Dr. Frank P. Graves, state commissioner of education of New York State, in an address before the State Teachers' Association, described the four laws passed by the last session of the legislature relating to rural education which, the commissioner declared, would go far toward improving the educational opportunity in the rural districts. Dr. Graves conceded that the cities had been affected by the new legislation to a very limited extent.

For the solution of the schools' financial problems in the cities, Dr. Graves advocated that boards of education be given full control of their budgets up to a maximum of one per cent of

(Continued on Page 103)



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Board of Education,  
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Board of Education,  
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University of Kentucky,  
Lexington, Ky.  
State Normal School,  
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Independent School Dist.,  
Buhl, Minn.  
Moler System of Colleges,  
St. Louis, Chicago.  
Consolidated Schools,  
New Britain, Conn.  
University of California,  
Berkeley, Calif.  
Bethlehem School District,  
Bethlehem, Pa.

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Lincoln High School, Lincoln, Nebr.



(Continued from Page 100)

the total assessed valuation of the city. He points out that while such a division may seriously limit the expenditures for other city needs, it can hardly be maintained that the development of a sound training in citizenship and character for all children of the city is not worthy of equal consideration with the material needs of the municipality.

At the present time the board of education has a right to ask for a budget equal to 4.9 mills of the assessed valuation. This is approximately half its needs. The board of estimate has discretionary power over the remainder of the school expenditures, except that it must provide for teachers' salaries.

If the board of education has the right at present to demand an appropriation of at least one per cent of the assessed valuation it would have full control over practically its entire budget. This year the school budget is slightly in excess of \$100,000,000, which is about one per cent of the assessed valuation. The budget request for 1926, as proposed, is approximately \$105,000,000, which is somewhat less than one per cent of the indicated assessed valuation.

School financing was discussed from another point of view by Paul R. Mort, assistant professor of education at Teachers College. Contending that past experience has fully justified the policy of state and local schools, he urged that the state's share of school costs should be gradually increased until it appropriates fifty per cent more than it does at present. Under present conditions, said Prof. Mort, the state education department provides splendid leadership in education, but whether the localities follow this leadership or not is wholly dependent upon themselves.

—Governor Smith of New York State, at a conference on November 6th in the executive chamber, discussed sources of taxation and problems of financing education in the large cities as outlined in his message to the legislature.

The situation in cities where the two per cent tax limit on education is working hardships was taken up, as also the relation to taxation of administrative reforms in the control of education.

The meeting was intended to thresh out in

detail, the proposal advanced last year to increase the state aid to rural and city educational activities by \$9,000,000. It is expected that the Governor will ask the legislature to appropriate \$18,000,000 for a double portion of state aid next year, inasmuch as the proposed \$9,000,000 appropriation failed during the last session. The conference discussed many aspects of the question, including the special situation in cities where the two per cent tax limit on education is working hardship.

—In the face of steadily decreasing per capita costs, the proportionate amount of the current expense dollar devoted to the instruction of pupils in the Seattle, Washington, schools has steadily risen year by year. In the year just closed, 78.5 cents of the current expense dollar were expended for instruction, while in 1920, but 72 cents were so used.

This achievement has been made possible by the cooperation of all concerned in the lowering of other school costs. The following figures tell the story:

	1920	1921	1923	1924	1925
Administration .....	.051	.043	.034	.034	.033
Instruction .....	.720	.753	.749	.766	.785
Operation .....	.124	.112	.125	.115	.109
Maintenance .....	.068	.061	.058	.049	.045
Auxiliary and Miscellaneous .....	.037	.031	.034	.036	.028

The per capita costs for the same years were as follows:

	1920	1921	1923	1924	1925
High School .....	\$133.19	\$149.86	\$125.22	\$120.26	\$117.76
Elem'y School .....	91.57	101.97	85.79	85.51	84.54

### Reduced Appropriations for Cincinnati Schools

The schools of Cincinnati will have to get along for the year 1926 with \$197,000 less than the board of education had estimated as necessary. The reduction in the board's request made by the budget commission, according to the Cincinnati School Index, reduces the school tax by  $\frac{29}{100}$  of a mill, and the school board's income by the sum mentioned. The levy thus reduced had up to this time been regarded as mandatory and inviolable.

The total tax levy for all purposes will be 21.16 mills or 2.24 mills more than last year. This 21.16 has been allotted by the budget commission as follows: County, 4.75 mills; schools, 6.33 mills; city, 9.83 mills; soldiers' bonus, .25

mills. The tax levy for schools will be \$6,221,218.

### School Taxation in Missouri

"More revenue must be raised by the state if the state is to carry on its work, if the higher educational institutions are to live; if the public schools are to receive anything like the support from the state they should receive." So says "The School and Community" of Columbia, Missouri, in a recent issue.

The support now given the state school fund is derived from the following sources:

- 89.9 cents is obtained from local taxation.
- 8.4 cents is obtained from direct appropriation.
- .4 cents is obtained from interest on State Funds.
- 1.1 cents is obtained from interest on County Funds.
- .3 cents is obtained from Special District and Township Funds.

The last data from the State Superintendent's report shows that the various funds and sources of support and the interest from them available for use by the public schools were as follows:

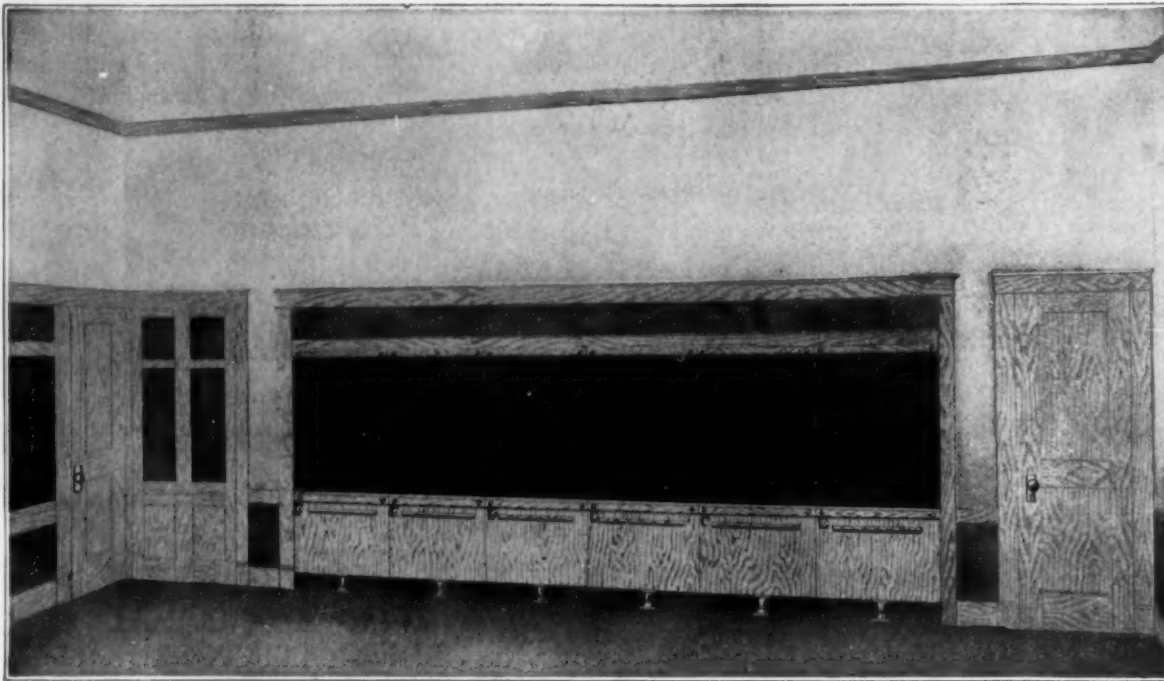
Special District Funds.....	\$ 102,503
Township Funds.....	2,333,204
County Funds.....	9,376,833
State Funds (State certificates of indebtedness) .....	3,159,000

Total of all Funds.....	\$14,971,540
Interest on Township Funds.....	\$ 154,504
Interest on County Funds.....	539,185
Interest on State Funds.....	187,040

Total Interest.....\$ 880,729

In discussing the subject of taxation in the direction of a larger revenue, the publication says: "The income tax is now used very extensively by the United States government and is also in use in eleven states, one of which is Missouri. Some of the states, notably Delaware, set aside the income tax for school purposes. Income certainly represents ability to pay and an income tax also falls upon incomes from intangible property. Thus the income tax is strong in exactly the places where the property tax is weak, that is, it does fall upon intangible property and upon those able to pay."

# OPEN IT IN A SECOND



## MILLER SCHOOL WARDROBE

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### SCHOOL SUPPORT AND POPULATION

"It may seem quite strange that of all the factors determining the cost of education and the ability of a community to pay for it, the effect of the number of children involved has been most inadequately treated."

This statement is the basis of a study made by Harold F. Clark of the Indiana University in which he seeks to demonstrate the effect of population upon ability to support education. He sets forth that:

"It is evident that if one working man has a family of four children, he cannot educate them as well as another man with an equal income who has two children. The same thing is true of communities. Yet no one has called our attention to the fact in an adequate fashion. If in one community there are four adults to each school child and in another community only one adult to each school child, the first community will be more able to support schools than the second. To state it simply, if one community has four times as many children as another, it is not as able to provide an education for each child. This is not an extreme case, for there are many communities that have more than four times as many children as other communities of the same population. Even in one state, Indiana, there are whole counties that have twice as many children per 1,000 people as other counties. To every 1,000 adults in Brown County, Indiana, there are approximately 1,000 children; to every 1,000 adults in Marion County, Indiana, there are approximately 500 children."

Mr. Clark also ascertains the number of adult males for each 100 children from 5 to 19 years of age in several cities, as follows:

San Francisco	214.1
Seattle	212.8
Los Angeles	171.2
Minneapolis	144.5
Washington	132.9
Cincinnati	125.0
Buffalo	107.2
Newark	106.2
Milwaukee	105.2
New Orleans	99.1

Average.....141.8  
He then approaches his study from the stand-

point of the several states showing the number of adults over 21 to each child under 21 in the following table:

.86.....	South Carolina
.89.....	North Carolina
.95.....	Alabama
.96.....	Mississippi
.97.....	Georgia
.98.....	Arkansas
.99.....	North Dakota
1.01.....	Oklahoma
1.03.....	Utah
1.06.....	Louisiana
1.06.....	New Mexico
1.06.....	West Virginia
1.08.....	Tennessee
1.09.....	Texas
1.09.....	Virginia
1.14.....	Kentucky
1.18.....	Idaho
1.18.....	South Dakota
1.24.....	Florida
1.28.....	Arizona
1.32.....	Nebraska
1.36.....	Minnesota
1.36.....	Pennsylvania
1.37.....	Kansas
1.38.....	Wisconsin
1.39.....	Montana
1.46.....	Iowa
1.47.....	Wyoming
1.47.....	Maryland
1.49.....	Missouri
1.51.....	New Jersey
1.51.....	Colorado
1.52.....	Michigan
1.54.....	Indiana
1.54.....	Connecticut
1.55.....	Illinois
1.56.....	Rhode Island
1.58.....	Delaware
1.60.....	Vermont
1.62.....	Ohio
1.62.....	Maine
1.67.....	Massachusetts
1.68.....	New York
1.71.....	Washington
1.71.....	Oregon
1.73.....	New Hampshire
2.08.....	Nevada
2.09.....	California

The table is to be read as follows: South Carolina has .86 of an adult to each child, North Carolina has .89, and so on for each of the other states.

Mr. Clark believes that in addition to the other factors usually employed, the formula here suggested will make a complete index upon which to measure the ability of any community to furnish a proper education to each child.

—Bristol, Conn. The school board has adopted a budget of \$304,357 for the coming year, which is an increase of \$22,458 over the previous year. This year there has been an increase of \$19,450 for new teaching positions in the high school, special school and grade school; an increase of \$4,732 for salaries affecting 50 high school and special teachers and clerks, \$3,618 for additional materials and supplies, etc.

—Supt. F. O. Holt, of Janesville, Wis., has prepared a detailed report, in which he reveals a number of interesting facts about the local school system. The report shows that Janesville spent an average amount of \$97.85 on each child attending school during the past year. Janesville is eighth from the top of a list of Wisconsin cities, West Allis being the highest, with an average of \$220, and Marinette being low, with an average of \$71.62. Beloit is seventh with \$96.28. Janesville occupies sixth place in the figures on actual costs of instruction, spending \$69.88 per pupil for this item. Madison was highest, with \$86.97, West Allis spent \$81.73, and Beloit is eleventh with \$96.28.

In the study, Janesville ranks eighth on the first table mentioned, and is close to the cities ranking nine, ten and eleven. In the second table, there are five cities which spend more than Janesville does, and cities ranking six, seven, eight, nine, and ten all spend around \$65.

The report discusses the expense of the night school, run under the direction of the vocational school, and the expense of the heating and lighting of the high school.

—Both Edgerton and Evansville, Wis., face the prospect of larger school taxes as a result of the detaching of sections of townships from the city school district. In the case of Edgerton,

(Concluded on Page 106)



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(Concluded from Page 104)

the amount will be increased around \$1,200. In the case of Evansville, the township zone will be detached after the close of the present school year in June.

—The school system of Waterbury, Conn., faces a deficit of at least \$10,000 in teachers' salaries alone, at the end of the school year, due to the reduction of the budget by the board of finance and aldermen. The total budget was reduced by \$83,000, of which \$21,000 was from the one item of teachers' salaries.

—Ottumwa, Ia. School bonds amounting to \$300,000, issued five years ago, at an interest rate of six per cent, will be refunded the first of next April at a lower rate of interest, under an order of the school board.

As a comparison in enrollment and expense items of the Ottumwa schools and other schools of first-class cities of the state, two lists of percentages were given at a recent meeting. Ottumwa compared with the first city named has an enrollment 76 per cent greater, an expense for teachers 35 per cent greater, janitor expense 59 per cent greater, fuel 19 per cent greater, and light, gas and water 32 per cent greater. In another comparison an Iowa city school district has an enrollment 54 per cent greater than Ottumwa, teachers' expense 97 per cent greater, janitors' salaries 148 per cent greater, fuel 50 per cent greater and light, power and water 76 per cent greater.

—Duluth, Minn. The board of education has adopted a budget of \$2,123,709 for 1926, which is a reduction of \$331,138 from the estimated budget, at a saving of .781 mill from the 1925 mill rate for taxation. The largest increase goes to the building fund, a total of \$925,525, more being spent in 1926 than in 1925. The budget although \$1,399,703 in excess of the levy, is covered by the bond issue netting \$1,700,403.

—Cleveland, O. Only bare necessities are accounted for in the school budget for 1926. The request for \$18,322,601 is approximately \$1,400,000 less than could have been demanded by law, according to the clerk-treasurer.

It is expected there will be a cash balance of \$1,860,000 to work on at the start of 1926. In the following years, however, the balance on hand, or the reserve fund, will be deducted from the budget of expense of the coming year.

The reduction of the appropriation means that 64 fewer teachers will be employed. The reduction is as follows: Kindergarten, \$5,000; elementary schools, \$200,000; junior high school, \$45,000, and senior high school, \$40,000.

—Indianapolis, Ind. The state board of accounts has approved a temporary loan of \$800,000 to be made by the board of education from its recent school bond issue of \$1,033,000. The loan is to pay another temporary loan of \$500,000 and to meet current expenses in anticipation of the payment to the board of fall taxes.

—Hoquiam, Wash. The school board has adopted a budget of \$222,669 for the school year 1925-1926. Of this amount, \$149,169 is for actual operating expenses of the schools. The budget is \$40,752 less than that for the previous year.

—Tacoma, Wash. The school board has adopted a budget of \$1,616,095, which represents a reduction of \$15,759 from previous estimated needs.

—The school board of Minneapolis, Minn., has adopted a budget of \$7,232,165, of which \$6,127,347 must be raised by taxation. The reductions include \$101,000 in teachers' salaries made possible by reduced forces; \$32,000 in supplies, and \$160,000 for equipment, building and land. Other items bring the total to \$327,460.

—Toledo, Wash. At a special election held in the Toledo school district, an extra levy of ten mills was voted to carry the schools through the year.

—Aberdeen, Wash. The school board has adopted a budget of \$368,000, which is an increase of \$20,000 over last year's budget. The total levy this year will be approximately eighteen mills, which includes the \$17,000 voted by the people last December.

—Moorhead, Minn. The school board has adopted a budget of \$122,795 for the school year, which is an increase of \$6,123 over that of last year. The fund for general control was set at \$7,000; the instruction fund at \$64,000; the operating fund at \$13,575; the maintenance fund at \$5,200, and the fund for auxiliaries at \$1,885.

—Racine, Wis. The board of education has adopted a budget to cover the current expenses of the schools from January, 1926, to January, 1927. The board has estimated expenditures

amounting to \$846,090 and revenues which will reach the sum of \$132,372. Of the expenditures, the largest amount will go for teachers' salaries, and the second largest for wages of janitors.

—The cost of education in Milwaukee, Wis., is \$6,596,057, which constitutes 35.5 cents of the general tax dollar exacted. The common schools cost \$4,512,000. The balance goes into continuation and trade schools, social centers and school repairs.

—The Sacramento, California, school system spends from \$1,200 to \$1,500 annually for broken schoolhouse windows due to careless pupils.

—Secretary Alfred Lister, of the Tacoma, Wash., board of education has issued a report showing in detail the receipts and disbursements and the financial condition of the district, and other information relating to the operation of the schools for the year 1924-1925. Among these are the estimate and tax levy; expenditure and estimate by accounts; receipts and disbursements by treasurer; general and building fund warrant accounts; receipts and disbursements by the secretary; uncollected tax accounts; school buildings and property; assets and liabilities; comparative statements 1916 to 1925; distribution of expense with percentage; per capita cost and distribution; general and statistical information; summary of expenditure; expenditure by departments and schools; expenditure of elementary schools.

—New York, N. Y. The board of education has been allowed \$103,984,000 for 1926, which is about \$3,300,000 more than for 1925. The board of estimate has cut \$1,000,000 from the general school fund. This cut represents no individual item but merely gives the board one million dollars less to spend.

—Large savings in the purchase of textbooks and supplies, variously estimated at \$14,988 and at \$33,305, were made in one year by the Newark, N. J., public schools through the adoption of a plan of visiting orders for supplies.

The present prices of textbooks are 55 per cent higher than in 1914, and in order that funds might be used to the best advantage, a system was adopted providing for the visiting of orders of principals, with the result as given.





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### HIGH SCHOOL ADMINISTRATION

—Philadelphia, Pa. The school board has been asked to approve recommendations of the committee on higher schools relative to graduates and non-resident students.

Under the proposed rules, no student would be admitted to a high school who has attained in any other secondary school, the number of points of credit equal to those required for graduation from a Philadelphia high school. Also, students graduated from the local high school after an attendance of less than one year, will be required to take an examination for admission to the normal school. Again, where a non-resident pupil has been attending high school contrary to the rules, and withdraws from school, no statement of the work accomplished during such attendance may be furnished until the bill for tuition has been paid.

### CERTIFICATION OF TEACHERS IN MICHIGAN

The character of the equipment which should be possessed by teachers of high school subjects is outlined in a most constructive program of certification, recently prepared by Dr. Arthur B. Moehlman, professor of school administration of the University of Michigan. The plan is the basis of certification of teachers graduated from the University of Michigan School of Education.

Under the plan, no individual will be certified for a teaching position who is notably deficient in respect to any of these qualities. Academic fitness being presupposed, the special concern of the School of Education is the development of teaching skills, professional spirit, and a scholarly attitude toward the problems of education. To this end, a program of studies has been suggested for the guidance of students who look forward to teaching as a life career.

Candidates for a teacher's certificate, it is pointed out, must possess that broad training commonly described as a liberal education. In general, undergraduate work is to be regarded as a period of liberal culture with a minimum of specialization. Students expecting to become teachers are urged to plan for four years of college work with especial care. College work in preparation for teaching should lead to four

types of development. These, together with the approximate number of hours to be elected in each field, are as follows:

A. Equipment and vision of the individual from the point of view of personal interests and development.

B. Such a general understanding of and interest in, current events in the life of the world as will make the individual an appreciative and contributing member of society.

C. Detailed and technical knowledge in fields of specialization.

D. Professional knowledge and skill.

During the undergraduate period there is time for only a minimum of professional training, but there are some fields of professional experience familiarity with which is essential. These are: Administration, instruction, psychology, history, philosophy, and observation and practice.

The teacher's certificate is given to a student in connection with the bachelor degree, provided he or she has met the specific requirements. Until October 1, 1926, students graduating from the College of Literature, Science, and the Arts, who have completed the number of hours work in education required by the School of Education for the certificate, will be entitled to it upon recommendation of the faculty of the School of Education.

The certificate is also given to a graduate student at the time of receiving a master's or a doctor's degree, provided he has pursued teaching as a major or a minor study, or has otherwise satisfactorily completed an equivalent amount of pedagogical work.

Under the rules, the certificate is to serve as a legal certificate of qualification to teach in any of the schools of the state, whenever a copy shall have been filed in the office of the legal examining officer of the county, township, city, or district. No certificate will, however, be given to a person who is not a citizen of the United States, or who has not declared his intention of becoming a citizen.

### TEACHERS AND ADMINISTRATION

—The Illinois State Teachers' Association passed resolutions asking its members to use

their influence with the newspapers in suppressing sensational descriptions of crime.

—"The legislature refused to help us kick politics out of the schools, by permitting boards of education to elect superintendents instead of forcing administrators to run for re-election. But we submit that the organized teaching force can kick politics out unaided, if they set their feet to the task." So says Home, School and Community of Georgia. "This can be done by simply refusing to countenance opposition to an incumbent who is rendering satisfactory service. Let us demand of any budding candidate some real reason for a change. If there is no wide difference in capacity the teachers should stand by the incumbent, and ridicule the aspirant.

—Teachers, either men or women, who smoke cigarettes will not be accepted for positions in the schools of the Hecker Creek district in West Virginia. The board has prescribed a required amount of normal school training for prospective instructors.

—In commenting on the action of the Shabbona, Ill., school board, in ruling that teachers must spend at least three week-ends in town, the Chicago Tribune holds that the teacher owes something to the adults as well as the children. It adds: "The Shabbona teacher is a symbol of something peculiarly American. In this country we have a passion for improvement. It applies not only to improving the mechanical conveniences of life—transportation, communication, and the rest—but also to self-improvement. We like our heroes to walk miles for a book and to study late into the night by the light of an open fire, with the back of a shovel for a slate."

—A resolution introduced in the Boston, Mass., school board compelling 1,300 teachers to move into the city or resign was defeated. The rule was based on the slogan that "if a town is good enough to make a living in, it is good enough to live in." The board, however, believed that the rule would not be beneficial to the schools.

—Fifty teachers of Ashland, Kentucky, became hostesses to the local Kiwanis Club. The affair served to bring about a better under-

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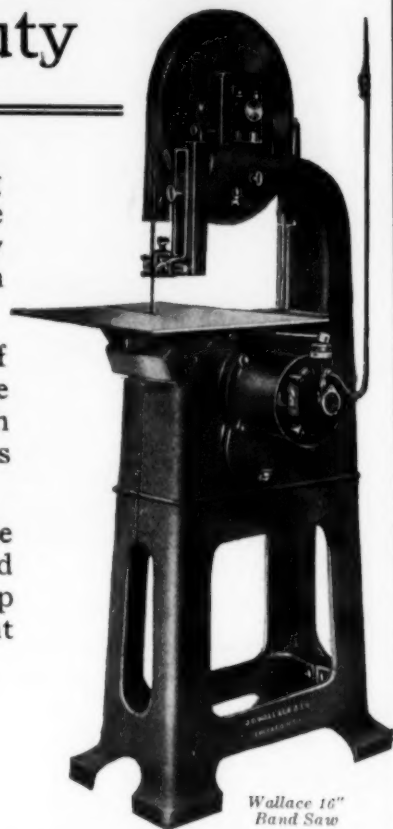
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standing between the educational workers and the business men of the city.

—Griffin, Ga. Through cooperation with the department of education of Emory University, an extension course in tests and measurements has been arranged for the teachers of Griffin and Spalding County. The course is conducted each Monday by Dr. F. C. Chillrud.

—A member of the Middletown, Ohio, school board recently said: "I propose to see whether something cannot be done in regard to these lip sticks and a general calamine effect of rouge and rice powder. I have no objections to schoolteachers dressing neatly, and expensively if they choose, but I have been and am opposed to the rostrum of the schoolroom run in competition to a musical comedy performance in the extreme and constant use of cosmetics in class and out of it."

—Seattle, Wash. Teachers in the city schools have not been slow to avail themselves of sabbatical leave for professional study, advocated by the board of directors upon recommendation of Supt. Thomas R. Cole. During the last half of the year, fourteen members of the teaching staff have been given leave of absence under the provisions of the plan. Each person on leave receives the difference between his or her salary, and that of a Class A substitute. Not more than twenty persons each semester are eligible for such leave.

—Ten representative cities in the United States are continuing visiting-teacher work as part of the public school systems as a result of three-year demonstrations by the Commonwealth Fund Program for the Prevention of Delinquency. At present there are 186 visiting teachers in the country, working in 64 cities and six counties.

—Shabbona, Ill. The school board has adopted a rule, enforcing it with a clause in the contracts, requiring that teachers spend at least three week-ends of every month in the confines of the village. Teachers are allowed only one week-end a month for entertainment outside the town.

—Dayton, O. The city teachers may adopt the uniform dress idea. Supt. P. C. Stetson points out that while no compulsory measures

have been taken, he can see no reason why those especially inclined, cannot adopt the costumes accepted with enthusiasm in other communities. An eastern costume consists of a three-quarter length, loose-fitting smock which is slipped over the street dress. Two large pockets serve as convenient places for chalk and other materials.

—Parsons, Pa. Teachers in service less than five years will be allowed thirty days' absence during the school term with part pay, under a new rule of the school board. Teachers in service five to ten years will be allowed forty days, those in service ten to twenty years will be allowed sixty days, and those in service more than twenty years will be allowed ninety days. If a teacher is allowed more than the allotted time, full salary will be deducted.

—The state of California has pensioned forty pioneer school teachers, with terms of service in the state ranging from 30 to 54 years. One teacher was retired at the age of 75, after a teaching service of 54 years.

—Bay City, Mich. A former third grade teacher, Miss Eva Ausem, has begun suit against the school board, charging breach of contract in prohibiting her from teaching in the schools. It appears the board had contracted to hire the teacher on April 15th, and at the opening of the school year, she was notified that her services were not required. In September the board had adopted a policy whereby married teachers would not be employed. It was understood before the contracts were signed that no married teacher would be employed, and the board contended that it was impossible to know that teachers would be married after their contracts had been signed.

### TEACHERS' SALARIES

—Griffin, Ga. A new salary schedule based on training, experience and efficiency has been adopted by the school board. The minimum salary shows an increase of six per cent and the maximum an increase of sixty per cent over the old schedule.

—The high school teachers of Milwaukee propose a new salary schedule fixing the minimum at \$1,600, and the maximum at \$3,600. The annual increment is to be at the rate of \$200 per year to stop at \$3,000. The further

advance is to be contingent upon teaching ability, length of service and loyalty to school pupils and the system as a whole.

—It is reported that one-half of the teachers of St. Paul, Minn., do not belong to a local teachers' organization because the one now maintained is affiliated with the American Federation of Labor. Members of the federation are assessed half of one per cent of their salary annually as dues. For a teacher earning \$1,500 a year this means \$7.50 and for one earning \$2,300 it means \$11.50. Members of the Men Teachers' federation pay a flat rate of \$7.50 a year. Altogether it is estimated that St. Paul teachers pay in excess of \$6,000 a year in dues. Of this, two-thirds or more than \$4,000, goes to the Trades and Labor Assembly, the American Federation of Teachers, and the American Federation of Labor. Only \$2,000 actually is used for the St. Paul organization and this is largely spent for the salary of the secretary and for other expenses which could be dispensed with, in the opinion of those favoring secession from the union. The Pioneer Press makes the following comment: "The citizens of St. Paul will resent the imputation that it is necessary for the teachers in the public school system to contribute several thousands of dollars to outsiders in order to obtain a fair deal from the city."

"Thus we have two evils which flow from this illogical and unnatural association—the levy of several thousands of dollars upon the teachers for which they get no return and the exclusion of non-members from meetings with the rest, meetings which in the normal course should be devoted to a discussion of problems that concern all of the teachers and to social enjoyment."

—Salem, Mass. School teachers have petitioned the city for an increase of \$300 a year in their salary, to be retroactive from September first.

—Chicago, Ill. The local principals' club is opposing a movement to submit the salary proposition to a public referendum on the ground that it might center its opposition to Supt. McAndrew's new salary schedule. The proposed referendum contemplates an increase of the educational tax rates from \$1.92 to \$2.92 in

(Concluded on Page 113)



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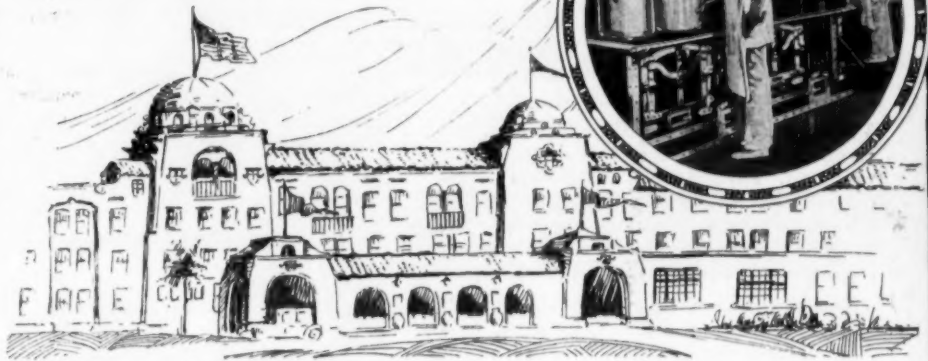
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(Concluded from Page 110)

order that the schedule may be put into operation.

—A report favoring Supt. William McAndrew's increased salary schedule for teachers and urging its immediate adoption has recently been presented to the joint committee on school affairs by F. S. Pope vice-president of the Chicago Trust Company and a member of the local Union League club. The report expressed the opinion of a subcommittee appointed to study all angles of the salary situation from an impersonal viewpoint.

As a result of the investigation, the subcommittee favors the adoption of the salary schedule as it now stands, and will propose to the joint committee resolutions to this effect. The committee holds that the matter is an educational policy and that if held over until the spring referendum, it will almost surely become a political football and a party issue. Then again, it is pointed out, to delay the matter is to start pressure on the part of the teachers to bring about the raise, and this should be guarded against. The decision should be made only on the question of whether or not it is best for the school children.

—Springfield, Ill. In the face of continued complaints relative to the recent salary schedule, the school board has taken steps to outline a new schedule to overcome the present objections. It was believed the present schedule had fulfilled all requirements, but two groups of teachers objected to the interpretations regarding the sixteen-year service record, and the requirement of special supplementary training within a five-year period for those with college degrees.

#### HYGIENE AND SANITATION

—The Mulberry Health Center, of New York City, has for six years maintained a health clinic for the periodical examination of pre-school children and a staff of nurses for follow-up work in the homes. The center has analyzed its expenditures and now reports that the service costs, on the average, about \$2.22 per child.

—One-fourth of the public school children in the United States have defective vision and symptoms of eye strain, according to J. E. Hanum, of the Eyesight Conservation Council of America.

—The attorney general of California has notified the state board of osteopathic examiners that school boards may not, under the law, employ osteopaths to examine children in the public schools.

—Dr. C. M. Pounders has been appointed medical inspector of schools at Oklahoma City, Okla.

—The physicians of Sheridan, Wyo., have urged the local school board to campaign against the goitre evil. They hold that, "Goitre is one of the greatest problems confronting the medical profession in this section of the country, and it is one of the most easily preventable diseases known—the scientific fact that the administration of a very small amount of iodine over a period of time, to boys and girls especially of school age, will prevent goitre in goitre districts is as firmly established as any of the fundamental truths of science."

—Massachusetts established by law, a few years ago, school clinics throughout the state for the mental examination of children who were three years or more retarded in the schools. The purpose was to discover mentally defective children and to provide for them a kind of training that would make them self-supporting and safe members of society. Fourteen clinics have been established, and in the last fifteen years about 15,000 children have been examined. The examinations are not compulsory; in 121 municipalities the examination was requested, and 116 municipalities have thus been examined. Special classes have been formed for these children and no schools have discontinued the classes once they have been formed.

—Providence, R. I. Medical supervision of the public schools will remain with the city health department until the close of the present school year, according to an announcement of

the superintendent of health. It is the intention of the school authorities to take over medical supervision of the children next year. The health department will then continue its work among the children in the parochial schools.

—Rutland, Vt. As a preventative measure against diphtheria, the school board has authorized the use of the Schick test upon all pupils in the schools. The tests were begun in two schools where some cases of the disease had been found.

—Doylestown, Pa. Medical examinations will be made of all pupils in the first eight grades. Follow-up work will be conducted by the school nurse immediately upon the completion of the inspection work.

—Tulsa, Okla. The board of education has voted to furnish eyeglasses free to dependent school children.

—Champaign, Ill. A complete system of parent-teacher associations has been in operation for some time, including an organization for each elementary building, one for the open-window school, one for the high school, and a general council acting as a cooperating agency. The activities of these organizations have been highly beneficial.

—New Orleans is to have a standard spelling dictionary peculiar to its needs, according to plans of Miss Ray Abrams, principal of the Boys' High School of Commerce. This "speller" is to contain all ordinary words used in the transaction of business, and all that can be compiled peculiar to the city and surrounding territory.

Because of the early influences in New Orleans, it is pointed out, many of the words of Spanish, French, and Indian origin remain to-day in the language of business here. And, together with them, are words not to be found in any standard language or in any other part of the country. There are Creole words such as "lagniappe" and "banquettes," the latte

# SCHOOL MAINTENANCE— how to reduce its cost

**A certain amount of expense each year is of course necessary to keep school buildings in repair. But how much expense largely depends upon the means you adopt to keep your physical plant in good condition. The value of the following suggestions in cutting maintenance costs has been thoroughly proved in hundreds of schools all over the country.**

**Floors**—You pay double for a dusty concrete floor. First, in the harm the dust does to lungs, clothing, and equipment. Secondly, in the floor repairs that soon follow in its wake.

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This surface is flint-like in its hardness. It resists the hardest kind of wear for years. It is dustproof, wearproof, waterproof. Lapidolith can be used on either a new or an old concrete floor.

If you have wood floors a treatment with Lignophol will prevent their rotting, splintering or drying out. Lignophol is a preservative liquid

that penetrates the wood, restoring its natural oil and gum. It lays the dust and does away with ordinary floor oils. It is odorless and non-inflammable. One application turns out a floor surface that is lastingly smooth, hard, and sanitary.

**Painted Surfaces**—If you paint walls and ceilings with Cemcoat, the gloss, eggshell or flat enamel paint, you will have interiors that are not only lastingly bright and cheery, but also easy to keep clean. A Cemcoated surface can be washed again and again; and no matter how dirty the wall may be, the paint comes forth clean and white.

Cemcoat retains this whiteness long after other paints turn yellow. It usually requires one less coat than other paints because of its body. It adheres to brick or plaster just as easily as to wood because it is not affected by the free lime that is always present in such a wall. Cemcoat is a beautiful, durable and economical paint, made for exteriors as well as interiors in white and colors.

**Roofs**—If your roof leaks, do not call in the

roofer. If you have a roof that is badly worn, do not replace that roof. You can stop that leak in a few minutes or you can make that roof as good as new with a coat of Stormtight—the elastic rubber-like waterproofing material. Stormtight is made in semi-liquid or plastic form and can be applied by anyone over any roofing material. It is not a temporary makeshift, but a permanent protection that has saved the cost of a new roof again and again.

**Exterior Walls**—Water will not seep through walls even in the hardest rainstorm if the outside of your buildings is coated with Hydrocide Colorless. This waterproofing material preserves the natural beauty of the brickwork, for its presence can not be detected on a wall.

Hydrocide Colorless contains no paraffin; it does not run in hot weather; it penetrates the brick; it does not collect dust; and it can be painted. If you would have warm, dry interiors no matter what the weather, use this perfect waterproofing material.

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meaning sidewalks. There are believed to be many such words in use in business in New Orleans.

The dictionary, so far as known, will be unique. There is no other city in the world, it is said, that will have compiled or found the necessity of compiling such a one. The dictionary will be compiled largely from lists submitted by New Orleans business men, including all words used in their correspondence and also letters covering various phases of business correspondence.

### DR. BICKNELL PASSES

Dr. Thomas W. Bicknell, of Providence, R. I., died on October 6th, at the age of 91 years. Dr. Bicknell was the founder of the Rhode Island State Board of Education, now 55 years old, and in 1871 founded the Rhode Island College of Education. He was commissioner of education from 1869 to 1875, and acted as president of the National Education Association in 1884. From 1859 to 1860 he served in the Rhode Island house of representatives. In 1875 he was called to act as editor of the New England Journal of Education. Dr. Bicknell was active in 37 organizations and had lectured in nearly every state in the union.

### PERSONAL NEWS OF SUPERINTENDENTS

—Ira A. Flinner, for fourteen years headmaster of Huntington School, Boston, has tendered his resignation to take effect July 1, 1926. Mr. Flinner will supervise a system of private schools for boys and girls in the Adirondacks under the Lake Placid Club Foundation.

—Mr. C. T. Barnes, who for a number of years was connected with the New York State education department, and who devoted his life to the cause of education, died on September 4th, at his home in Sauquoit. Mr. Barnes received the master of arts degree from Hamilton College in 1892.

—Supt. C. B. Hightower, of Valley Junction, Ia., resigned his position on November first. Mr. Hightower has contracted with the Metropolitan School Supply Company, of Cedar Rapids, to take charge of the firm's work in southeast Iowa.

Mr. C. I. Bixler of Emmetsburg, Ia., has been elected at Valley Junction, to succeed Mr. Hightower.

—Creed F. Bates, Jr., has been chosen principal of the new junior high school completed at Chattanooga, Tenn.

—Supt. W. W. Bennett of Center, Texas, has announced his candidacy for the state superintendency and has issued his platform. He holds that county school boards should have more power in consolidations, that the number of state school inspectors be reduced and that a teachers' tenure law be enacted. He also wants a teachers' pension law founded out of salaries, a teachers' placement bureau, the election of state superintendent for six years and no re-election.

—E. J. Hummell is the new district superintendent of the Beverly Hills, California, grammar schools. He comes to Beverly Hills from Santa Ana. M. A. Gauer is the new superintendent at Anaheim, California.

—Francis J. Haas has succeeded the late Dr. J. George Becht, as state superintendent of Pennsylvania. Superintendent Haas was a deputy under Superintendent Becht.

—Ohio. E. E. Holt, of Higginsport, succeeds A. F. Waters at Georgetown. Supt. George C. Dietrich has been re-elected for a term of five years as superintendent at Piqua. County Supt. D. H. Sellers has been re-elected for Miami County. Frank D. McElroy, formerly assistant superintendent at Akron, has accepted a supervising position at Cleveland. E. R. Vermillion has been elected superintendent at Gallipolis. H. W. Hodges, superintendent of Clinton County, has been appointed on the state board of examiners. County Supt. H. C. Aultman has been re-elected for a three-year term in Greene County.

—Mr. C. W. Conrad, of Anna, Ill., has been elected superintendent of schools at Marion, at an increased salary.

—The salary of Paul E. Stewart, superintendent of the Santa Barbara, Calif., schools has been raised from \$5,000 to \$7,200, with a new four-year contract beginning with July 10th last. Asst. Supt. Elden Ford's salary was increased from \$3,300 to \$3,800, and Homer Martin's, prin-

cipal of the high school, was advanced from \$4,500 to \$4,800.

—Mr. George J. Smith, superintendent of schools at Clifton, N. J., has been elected president of the New Jersey Teachers' Association. At the present time the association has 23,600 members, or 99.2 per cent of all the teachers in the state.

—Mr. H. E. Knarr of Des Plaines, Ill., is serving his fourth year as superintendent of the grammar schools.

—Walter Siders, superintendent of the Pocatello, Idaho, schools, was, for services rendered, presented with a gavel made of olivewood by the orphans who are beneficiaries of the Near East Relief of this country. The presentation was made by Secretary J. W. Crabtree of the National Education Association.

—Supt. C. W. Jenkins of Kellogg, Ida., during the past summer, entered upon the third year of graduate work at Leland Stanford University. He will return next summer for further work along the same line.

—Dr. Charles R. Skinner of Albany, N. Y., has retired as librarian of the state legislature, having reached the legal age limit of 80. Dr. Skinner had been in public service in the state and nation for the past 46 years. From 1886 to 1892 he was a deputy state superintendent of education, and from 1895 to 1904 he was state superintendent of public instruction.

—Dr. C. B. Cornell, superintendent of schools of Shaker Heights, O., has been given a leave of absence to take extensive graduate work at Teachers College, Columbia University. Mr. R. B. Patin, principal of the high school and assistant superintendent, will be acting superintendent during Dr. Cornell's absence.

—Mr. C. F. Daugherty, who has been state high school supervisor for Missouri for the last three years, resigned on September first. Mr. Daugherty is now at Bolivar, Mo., where he is preparing a thesis for the Ph.D. degree, for which he completed credits at Teachers College.

—Mr. W. S. Forney, who has served one year as superintendent of schools at Alexandria, Ind., is entering upon the first year of a three-year contract at an increased salary.

(Concluded on Page 117)



# For Corridors

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Frank X. Tewes,  
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Page 496

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Amer. School Board Journal, Dec., 1925.

(Concluded from Page 114)

—W. A. Pye, for seven years superintendent of schools at Eldora, Ia., has become principal of the Horace Mann school at Iowa City.

—Mr. Walter D. Cocking, for two years director of junior education at San Antonio, Tex., is now a member of the Division of Research in the St. Louis, Missouri, schools. Mr. Cocking will have charge of the work in curriculum revision of the city schools. He is a graduate of the University of Iowa, class of 1923, and previously served three years as superintendent of schools. He taught in the Ohio State University in 1923, and was a member of the summer faculty of the Texas University in 1924 and 1925.

—The city schools of Boise, Idaho, on October 16th, dedicated a public school field, which marked the realization of a dream of years in the community. The school field is open to all who seek recreation and development, and was obtained at a total cost of \$25,000 to the school district.

—Mr. Edward T. Duffield, for five years superintendent of schools at Virginia, Minn., resigned on December first, to become manager of the New York branch of the Albert Teachers' Agency.

Under Mr. Duffield's direction, the entire school system has been reorganized into a most efficient system, the student body and faculty have grown and many plant additions and improvements have been effected.

—Mr. Claude A. Bruner has been elected superintendent of schools to succeed Harry S. Rees at Washington C. H., O.

—Dale N. Roberts has resigned as superintendent of schools at Aledo, Ill.

—Dr. H. B. Howell, superintendent of schools at Phillipsburg, N. J., has tendered his resignation, effective January 10th.

—Mr. Frank S. Woolson, 44, supervisor of schools at Point Pleasant, N. J., died at the home of a relative in Philadelphia on October 21st, of a brain hemorrhage.

—Prof. G. W. Reavis, state director of vocational education for Missouri, has announced his candidacy for the office of state superintendent of instruction.

—Mr. Henry F. Fahrenkrog has been unani-

mously elected president of the school board at St. Louis, Mo. Mr. Fahrenkrog succeeds John C. Tobin, a former incumbent of the office.

—Miss Bessie Hawkins has been elected clerk of the school board at Pawtucket, R. I., to succeed Wm. C. Hendrick.

—Mr. Charles R. Foster has been assigned as first associate superintendent of schools at Pittsburgh, Pa.

—Mr. James M. Hughes has been elected superintendent of schools at New Castle, Pa., to succeed B. G. Graham. Mr. Hughes enters upon his duties on January first. Mr. Graham, the former incumbent, will become an associate superintendent in the public schools of Pittsburgh.

—Dr. Randall Condon, superintendent of schools of Cincinnati, has resumed his work after a year's leave of absence.

#### SCHOOL ADMINISTRATION

"There are at least two big outstanding problems in public education in Alabama today. The first one is the problem of trying to carry on the educational program that has been adopted by the state with the too little money that has been provided by the state to carry out that program," said Prof. John R. McLure recently. "The second problem is that the state school fund, which is now available, is not apportioned to the various counties so that all the children of the state will receive, as near as possible, an equality of educational opportunity. We are handicapped in Alabama by an unfair and inadequate method of apportionment. Any thoroughgoing statewide educational progress waits upon the right solution of these two problems."

—Mr. M. L. Duggan, of the Georgia Educational Department, has completed an educational survey of the city schools at Carrollton. The survey which is the most complete ever given in the state, covered an entire month. It includes intelligence and achievement tests applied to pupils from the third to the eighth grades inclusive.

—Alton, Ill. Meetings of principals with the superintendent and supervisors are held each alternate week. The first two items for round-table discussion appearing on each program of these meetings are:

1. Sources of professional unhappiness

which I have discovered since the last meeting.

2. Reasons for professional happiness which I have discovered since the last meeting.

—Springfield, O. A junior high school was opened this fall in the Frey building. A class in lip reading for deaf pupils has been organized, with a special teacher in charge.

—New Jersey's code of laws relating to the administration of its schools should be revised to meet modern needs, according to a report made before the seventy-first annual meeting of the New Jersey Teachers' Association on October 12th. The report which was presented by P. H. Smith, of Bayonne, pays tribute to the work being done by the elementary and high schools of the state.

Provision of facilities for the training of teachers is the crux of the whole problem. Supervision of normal schools by a committee of the state board is considered "farcical" and they should be under the control of the state commissioner of education. Referring to the educational laws, the committee believes that they were "largely intended for administration of rural schools."

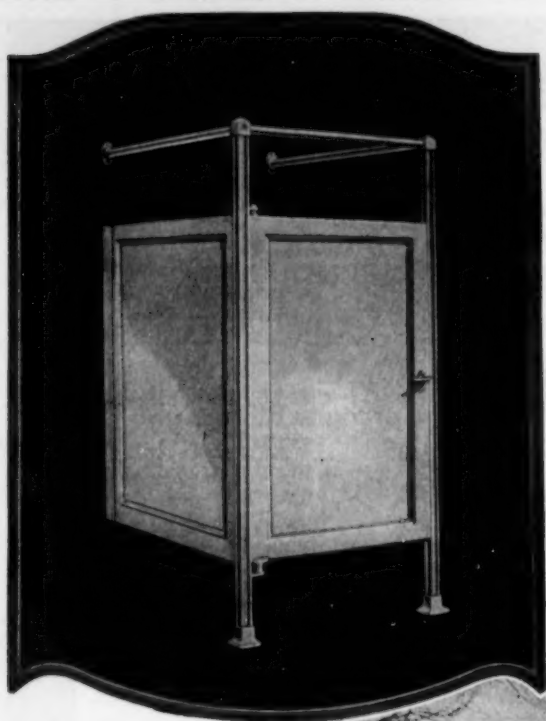
The committee was named after the Governor had asked the legislature to appropriate \$75,000 for a survey of the state school system.

—Griffin, Ga. A program of re-classification based on measured achievement and ability, has recently been undertaken by the school authorities.

—The school authorities of Shaker Heights, O., have issued a report showing that during the period from 1915 to 1925 the school enrollment increased from 147 to 1,701, or an increase of 946 per cent in a ten-year period. The largest increases have been in the last two years, an increase of 374 pupils from 1923 to 1924; and of 452 pupils from 1924 to 1925.

—The Washington Education Association has withdrawn its support of the child labor amendment which was rejected by the state legislature last winter. The Association maintains that it is still committed to some amendment which shall permit federal regulation of child labor.

Officials of the state association pointed out, that in their action on the child labor bill, they were following the leadership of the National Education Association.



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—Philadelphia, Pa. The school board has adopted a resolution providing that Philip A. Boyer be appointed to the position of director of educational research and results created by the board in November, 1924.

—The outgrowth of a feeling among parents and teachers that the subjects taught in the schools of Massachusetts are too numerous and not well enough organized, is a sweeping investigation by the state educational authorities. The main committee is composed of Dr. S. Munroe Graves, Wellesley; Wm. R. Peck, Holyoke; Wm. B. Snow, Boston; Miss Mary Mugen, Fall River, and John F. Gannon, Pittsfield.

A movement to secure an amendment to the Kentucky constitution removing the limitations to salaries paid to judges and school superintendents is fostered by the civic associations of Louisville. Mrs. B. M. Starks at a recent meeting, said: "Louisville cannot hope to continue to have able school administration unless we can pay a salary of more than \$5,000 a year to the superintendent," she said. "This city lost the last two superintendents to cities smaller than ours—Youngstown, Ohio, and Springfield, Mass.—because the citizens of those cities were able to pay \$9,000 a year."

—Four members of the board of education of Windsor Locks, Connecticut, Chairman Herbert P. Coffin, William J. Fitzgerald, John D. Egan, and John E. Mooney, are opposed to state supervision. It is proposed to eliminate the state supervisor and provide supervision under immediate control of the local school authorities.

—The students of the Central high school at Bridgeport, Conn., have petitioned the board of education for a shorter school day. Supt. Carroll B. Reed and Pres. Elmer H. Havens remain noncommittal until the issue is before the board. The comment of the Bridgeport Times is: "Support for the shorter day from a considerable portion of the student body is due to their desire to have their afternoons off, so they may engage in gainful occupations. Assuming that the Board had the best of good reasons for lengthening the hours of study, it ought not to be difficult to convince the undergraduates that

the chief object in view is their better mental and physical equipment."

—The administrative department at Fresno, California, has moved into commodious business offices in the Hawthorne school.

—The administrative department of the city schools of South Pasadena, California, will be accommodated in a new \$25,000 administration building. The new \$160,000 academic building will be occupied in the near future.

—Oshkosh, Wis. The school board has voted to return to the graduated salary schedule, discontinued two years ago, and to place it in effect with the opening of the school year 1926-1927. In the report of the committee on education, it was recommended that the members of the teaching staff be divided into three groups, namely the S group, the T group, and the U group. Teachers in the S group will be placed on the schedule as soon as funds can be secured to finance the salaries. Those in the T group will be on trial or probation, and those in the U group will be composed of teachers who are unable to keep their work up to the standard.

The schedule which will be put into effect in 1926, has seven classifications. Teachers under these classes will be given increases over a period of ten years. The first class is that of two year Normal graduates, the salary for the first year being \$1,000, with increases over the ten year period until \$1,600 has been reached. The second class is of two year Normal graduates plus one-half year of work, with the salary starting at \$1,100 and going to \$1,700. The third class calls for a two year Normal graduate, plus one year of work, and the salary ranges between \$1,200 and \$1,775. The fourth class is the same, except there must be one and a half years of work with the salary \$1,300 to \$1,850. The fifth class calls for a college degree with the salary \$1,400 to \$1,950. The sixth class calls for a degree and one-half year of work, the salary being \$1,500 to \$2,050. The highest paid class calls for a master's degree and the salary ranges from \$1,600 the first year to \$2,100 for the tenth year.

In addition, men teachers receive \$200 more than women teachers and married men receive

\$400 more. Department heads receive \$300 more. Special teachers (commercial, home economics, manual training and athletics) \$300. The schedule provides that no increase for a single year shall total more than \$150. Full credit for three summer sessions at an approved Normal school or university, the schedule provides, will be accepted as one-half year's work. One-half year's experience will not be counted unless added to another half year of experience.

—Ponca City, Okla. High school fraternities have been prohibited by the school board in compliance with the state law governing these societies.

—Austin, Tex. The school board has ruled against the compulsory reading of the Bible in the public schools. The vote was five to one in favor of leaving conditions as they are, with the Bible in each room of the schools, and with reading voluntary on the part of the pupils.

—The meeting of the Marathon County, Wisconsin, school board association was addressed by A. R. Thiede, county superintendent; Dr. F. F. Bowman, member state board of health, and George S. Dick, state supervisor of rural schools.

—The Baltimore, Md., school board refused permission to Congressman W. D. Upham of Georgia, a dry crusader, to speak in local high schools. It is a rule of the board not to permit discussions in the schools on controversial questions.

—In outlining a tentative educational program for the New Brunswick, N. J., schools, Supt. F. J. Sickles recently recommended a program for detecting individual differences in children, and recommended further that it begin with the child when he first enters school.

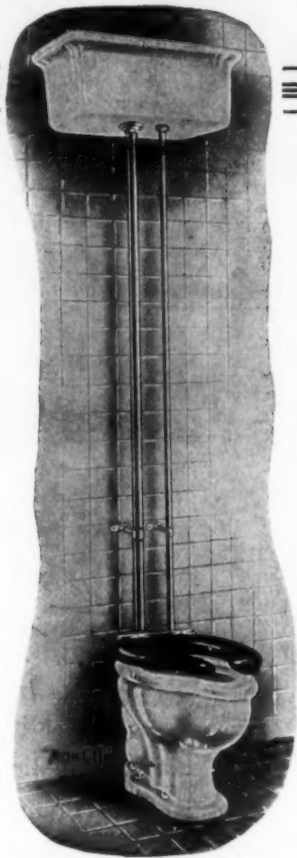
—West Chester, Pa. Forty-five rooms of the public schools will be used this year by the senior class of the West Chester Normal School for observation and practice.

—Rochester, Pa. The board of education has ruled that any child who becomes 6 years of age during the first semester may be admitted at that time. There will be no admissions of children after the beginning of the second semester.



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### CHICAGO CORRESPONDENCE

The Chicago school people's attempt to make Hallowe'en safe and sane was officially declared a success in a resolution of praise and commendation adopted by the school board. At the Superintendent's request a committee of thirteen principals undertook the administration of the campaign.

Thirty-three theater owners offered free use of their show houses for a Saturday morning program on October 31. The big firms of Balaban & Katz, Orpheum Circuit, Lynch & Shaeffer Circuit, and Lubliner & Trinz, offered their theaters gratis, and several neighborhood movie houses responded. Films were furnished by Pathe, Famous Players, First National and Metro-Golden Exchange.

The program consisted of music, a five-minute speech on the meaning of Hallowe'en, and a film such as "Sherlock, Jr.," "Long Live the King," and "Robinson Crusoe" by Jackie Coogan, "Peter Pan" by Betty Bronson, "Seven Chances" by Buster Keaton, "Never Say Die" by Douglas Maclean, "King of the Wild Horses" by Rex Horse, "Love Master" by Strongheart, "Boy O' Mine" by Ben Alexander, and a comedy by Monty Banks.

Admission was by ticket only. On the ticket was a pledge to refrain from certain grosser misdeeds, and each pupil signed his ticket-pledge. Thousands and thousands of children participated from 140 different public and parochial, elementary, junior high, and senior high schools.

The music was furnished by paid professional orchestras.

The speakers were principals, business men, Boy Scout leaders, district and assistant superintendents, Chief of Police Collins and Mayor Dever.

The principals' committee put across this program on ten days' notice. Naturally one hundred per cent decrease in hoodlumism was not attained, but a splendid start was made, and next year should go far to wipe out the hitherto general prevalence of destruction of property and misdemeanors. Principals from all parts of the city checked up on results in their districts, and the reports showed an astonishing peace and quiet on Hallowe'en night, but, as Superintendent McAndrew remarked, "We could

have made a still better showing if it had rained."

In order to check up on the efficiency of the school engineer-custodians, the business manager of the Chicago board of education presented the following blank for adoption by the board. This blank is to be used by the inspector of school property; it is to be made out in triplicate and a copy left with the principal of the school, another sent to the bureau of real estate and inspection, and another left with the engineer. Under civil service rules a mark of 85 is the highest attainable; then, from a possible 85, one point will be deducted for delinquency in each item checked on the form blank. The rules committee expects the business manager to bring in this blank as a departmental ruling and it will recommend its adoption to the board.

It might be noted that this blank rates efficiency only. Promotions of engineers are based on seniority and efficiency ratings, the former being weighted at 70 and the latter 30.

#### REPORT OF INSPECTOR OF SCHOOL PROPERTY

..... School

Date.....

**Grounds:**

( ) Grass not cut.

( ) Grass not watered.

( ) Shrubby not watered.

( ) Debris not removed.

( ) Light Courts not clean.

**Walks:**

( ) Walks not swept.

( ) Snow not removed.

( ) Team Tracks not swept.

( ) Entrances.

**Sweeping:**

( ) Basements.

( ) Corridors.

( ) Stairways.

( ) Rooms.

**Dusting:**

( ) Mouldings.

( ) Baseboards.

( ) Stairways.

( ) Window sills.

( ) Desks.

( ) Tables.

( ) Planos.

( ) Tops of lockers.

( ) Tops of bookcases.

( ) Door Mats.

( ) Flag not displayed.

**Toilets:**

( ) Odor.

( ) Seats.

( ) Urinals.

( ) Floors.

- ( ) Mouldings.
- ( ) Wash Bowls untidy.
- ( ) Drinking Fountains.
- ( ) Chalk Troughs not clean.
- ( ) Fire Extinguishers.
- ( ) Electric Light Fixtures.
- ( ) Was Engineer at Building?

Items checked (x) are not in satisfactory condition and must be given more attention.  
For each item checked one point will be deducted from efficiency mark of 85.

Inspector of School Property.

The committee on joint school affairs, consisting of delegates from 25 leading civic organizations in Chicago, recently had a hearing on the proposed teacher-salary schedule of Superintendent McAndrew. The delegates listened to a debate between Miss Margaret Haley, business representative of the Chicago Teachers' Federation, who spoke in opposition, and Dr. William B. Owen, president of Chicago Normal College, who spoke in favor of the schedule. In the meantime the committee had named a subcommittee of its own to investigate the merits of the question.

Mr. Frederic S. Pope, vice-president of the Chicago Trust Company, and Mrs. Emile Levy, drafted the subcommittee's report. The report completely favored the McAndrew schedule and urged its adoption by the school board. The delegates present took a ballot and not only voted in favor of the Superintendent's schedule but undertook to go back to their organizations to obtain similar affirmative action there.

Mr. Pope reported as follows on the question of immediate or delayed adoption:

"The committee believes that this matter is an educational question, one of educational policy. If it is held over until the spring referendum it is almost sure to become a political football, a party issue. Then again, the longer the matter is delayed the more chance there is of the teachers starting to exert pressure to bring the raise about. This should not be either. The decision should be made only on the question of whether or not it is best for the school children."

The school board, nevertheless, has gone ahead with plans to ask for an additional tax rate for the educational fund, which, if granted by the voters in the primary election next April,

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- Toronto Public Schools
- East Side High School,  
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- Cass Technical High School,  
Detroit, Mich.
- Technical High School,  
Omaha, Nebr.

will provide funds for teachers' salary increases and other educational expenses.

A study made by the chairman and secretary of the finance committee of the Chicago Board of Education stated that the new junior high schools are expected to save enormous sums to the taxpayers in the next few years. It is estimated that they will cut the school expense account \$16,100,000 in the next 25 years.

Two years ago when William H. Campbell, secretary of the board of examiners, was up for reappointment, a determined fight was made against him on the floor of the school board chambers. After a spirited contest, his reappointment was confirmed. On October 1, 1925, Mr. Campbell's term expired. Despite previously announced opposition, Superintendent McAndrew renominated him for the post.

On November 12 the school board refused to confirm the nomination by a 10 to 1 vote and directed the superintendent to bring in the name of another person for the position. Mr. McAndrew announced that he would name no one else and it has been intimated that only court action will finally settle the controversy.

The charges against Mr. Campbell are that he is brusque and almost rude to board members and others, and that he is too old for the position. He is said to be 74 years old. Superintendent McAndrew responds that the chief objection to Mr. Campbell has been that he is too scrupulously honest and unbending to the multitude of favor seekers. He has been characterized as "the last bulwark between the schools and the wolves of politics." He is an ex-Methodist minister and generally regarded as impeccably honest. The newspaper reporters claim to have seen innumerable letters asking favors such as waiving the age limit rule for taking examinations, granting revision of papers to unsuccessful candidates, and so forth. Letters asking favors by board members, letters signed by state legislators, and letters by an ex-mayor have had some prominence in the public press indicating the tremendous pressure put on the occupant of the position of secretary of the examining board.

Superintendent McAndrew, fortified by legal opinions of three attorneys, one of whom is a

former board attorney, declares that the board cannot legally name anyone for the position except on his nomination. The present school board attorney declares that the board may fill the position by a two-thirds' vote even though the superintendent does not make the nomination. If the board attempts to do so, an injunction might follow.

Last winter the school board went on record in favor of the compulsory retirement of school people at the age of seventy, and a bill was put through the legislature to that effect, providing an annuity of \$1,500 besides the pension. The bill failed by a technicality or flaw in its adoption. Now the school board declares that it has previously gone on record favoring a 70-year retirement, and cannot with good grace confirm Mr. Campbell's nomination.

The school board attorney is reputed to be drawing a bill for presentation at the next meeting of the legislature making retirement compulsory at seventy. One plan reported on would provide an annuity of half the average salary received during the past ten years with a minimum of \$1,500 and a maximum of \$2,500. One compulsorily retired would be given the title of "consulting teacher," "consulting principal," etc. The newspapers have gone so far as to print a list of 44 teachers and 26 principals ranging in ages from 70 to 83, who would be retired now, if there were such a law.

The action of the school board in the Campbell case is the first reversal Mr. McAndrew has received since his arrival in Chicago.

According to data for September, 1925, there were 357,383 elementary school children, 9,747 junior high school pupils, and 65,762 high school students in Chicago. There was a total of 447,855 persons enrolled in the day schools.

One noticeable fact is a lessened total enrollment over previous years. The average increase for the preceding five years is 18,892. The 1925 increase is almost 7,000 students short of the average. If the increases in the next few years are correspondingly lower, then natural causes may help the school board reduce the 75,000 seating shortage.

Superintendent McAndrew has filed charges of inefficiency against eleven teachers in the

Chicago school system. The school administration committee of the board of education will act as a trial body to hear the charges and the arguments of the defendants. Under the tenure law a teacher may be dismissed only after a public trial by the board, and even then the case may be carried to the civil courts if the verdict goes against the employee under trial.

The trials have been set for December 15th. The superintendent and school board seem bent on a serious attempt to establish efficiency in the teaching force, and this bold move is in line with their endeavors.

Last year the Chicago teachers' councils were abolished as official school organizations and the Chicago Public School Teachers' Council, consisting of representatives from each teaching group, was set up in their place. Recently this new council has made a report on Appraisal of Teachers. Following is a copy of it:

As a result of an extended conference with the Chicago Public School Teachers' Council, representatives of the various parts of the educational department being present: teachers, principals, and superintendents, I submit this tentative plan for rating the teaching service in the elementary, continuation, junior, and senior high schools, and request criticisms on it by your organization.

**PURPOSE.** The rating system is for:

- a. Maintenance and increase of efficiency.
- b. Bases for promotion.
- c. Bases for ridding the school of incompetents.
- d. Emphasizing particular features or projects adopted by the school system.
- e. Education of the raters to a more comprehensive knowledge and skill in supervising instruction.
- f. Elimination of chances of records based on inefficient observation or data or any personal whim of the inspector.
- g. Provision for a record of a teacher leaving the system so that when they write in from another city instead of giving just a guess, give the official record.

Following is the blank in its present tentative state, subject to amendment as the result of your and other recommendations.

(Concluded on Page 125)



# Recent developments make Carrier Washers better than ever

Not content with "near-perfection," we have recently made improvements in Carrier Air Washers which make them more than ever the finest equipment in the world for supplying pure, tempered air for schools.

Better spraying system, better eliminating apparatus, better controls, better materials, better facilities for inspection,—in every way the improved Carrier Washer is BETTER.

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**Carrier Air Conditioning Company of America**  
186 MORTIMER ST. BUFFALO, N. Y.

(Concluded from Page 122)

### APPRAISAL OF TEACHING

(Teacher's Name)

For Semester Ending.....School

A. KNOWLEDGE OF SUBJECT. Related fields, general information, familiarity with reference works, scholarship, professional improvement.

Superior = 10; Excellent = 9; Satisfactory = 8; Unsatisfactory = 7; Inefficient = 0 to 6.

B. TEACHING ABILITY. Definite aims, preparation in reference to ability and needs of pupils, good English, clear exposition, questions are thought provoking, teacher requires persistence of pupils, plan book adequate and available, adequate directions for study by pupils, attitude of class active and alert, control of class, objective illustration, blackboard, etc., adequately employed, correction of inaccuracy, avoidance of waste time, entire class engaged rather than a succession of dialogs between teacher and pupil, questions asked and class held responsible before calling on one individual, definite assignment of lessons, care of room, ability to obtain adequate response from pupils without too much talking by teacher.

Superior = 20; Excellent = 19; Satisfactory = 17; Unsatisfactory = 16; Inefficient = 0 to 14.

C. PROGRESS OF PUPILS. Pupils interested and alert, success in bringing pupils to fitness for promotion, success of pupils in succeeding grades, thinking power and self-reliance, pupils' voices audible and pleasing, pupils' use of English, influence on pupils' character, honesty, courtesy, orderliness, unselfishness; pupils' handwriting, legibility and form; pupils' habitual self-improving of computations; pupils' accuracy, study habits of pupils.

Superior = 30; Excellent = 28; Satisfactory = 26; Unsatisfactory = 21; Inefficient = 0 to 19.

D. COOPERATION WITH PUPILS AND COMMUNITY. Willingness to help school progress; community activities; tact and

courtesy in dealing with parents; courtesy, sympathy and regard for all children assigned; fairness, firmness, and justice; special services rendered pupils.

Superior = 10; Excellent = 9; Satisfactory = 8; Unsatisfactory = 7; Inefficient = 0 to 6.

E. COOPERATION IN SCHOOL MANAGEMENT. Cooperation with principal, and other teachers; punctuality; promptness and accuracy with school records; suggestion for improvement of the school; loyalty to city, state, and nation; special services rendered school; regular attendance; prompt and intelligent compliance with instructions.

Superior = 15; Excellent = 14; Satisfactory = 13; Unsatisfactory = 12; Inefficient = 0 to 11.

F. PROFESSIONAL STANDING AND GROWTH. Adaptability to suggestion for professional improvement; professional reading or taking of courses; participation in departmental clubs, societies, and movements for improvement of the system.

Superior = 15; Excellent = 14; Satisfactory = 13; Unsatisfactory = 12; Inefficient = 0 to 11.

SUPERIOR = 100; EXCELLENT = 93; SATISFACTORY = 84; UNSATISFACTORY = 75; INEFFICIENT = 0 to 67.

(The final rating must be the sum of the ratings of A, B, C, D, E, F.)

Additional record in the case of teachers rated "Superior": Notable excellencies of habit, temperament, service and success.

Additional record in the case of teachers rated less than "Satisfactory" when any of the following details are largely responsible for the low rating:

Personal appearance and dress, health; failure to follow what specific directions for improvement; detrimental habits; too often repeating pupils' answers; incessant use of concert recitations; persistence in unproductive and wasteful methods.

Specify.

### PUTS BAN ON FRATERNITIES

The board of education of Des Moines, Iowa, has placed its ban upon all fraternities and

sororities in the high schools. "In this respect the members of the school board exhibited more common sense," says the Marshalltown Times Republican, "than the weak parents who attempted to justify their own surrender to the demands of their youngsters." The paper continues: "Fraternities and sororities have their place in great universities where students of a more mature age must live away from home and a cooperative home is provided by the fraternity. However, these societies can be dens of iniquity if they are not very carefully regulated and they do constitute a real problem in our universities even though they do perform a function of usefulness."

"When we come to a high school every youngster lives at the home of his parents. There is no need for a fraternity house as a place in which to live. Friends and acquaintances are made in the school life without clubs or secret societies because the student population of a high school is always limited. The average age of high school kids does not fit them for self-government of their own personal conduct in their secret fraternities. The fundamental purpose of our public school is to teach democracy. We are trying to educate the race to avoid cliques and clans. In actual practice the fraternity in high schools introduces problems that annoy the school authorities. No experienced school superintendent or principal wants to see them get into his school. The fact that kids and youngsters and sixteen year olds of immature judgment want them should have no weight with parents or school boards."

### ANNOUNCE CONVENTION DATES

The next annual meeting of the National Education Association will be held June 27th to July 2nd, at Philadelphia, Pa.

### Association Elections

—James A. Burke, principal of the Garfield school of Spokane, Washington, was elected president of the Spokane Education Association.

—George H. Tucker of Klaber, Washington, was elected president of the Lewis County Superintendents' and Principals' Association. Alfred Perks of Pe Ell was chosen vice-president, and W. F. Bailor of Onalaska, secretary-treasurer.

# Smith's IMPROVED

# PANIC EXIT LOCKS

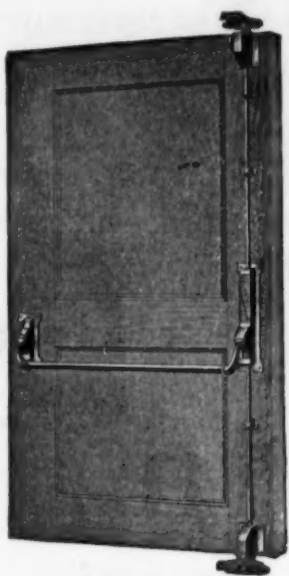
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## The LEVER Principle

It is the Exit Lock with Lever Action at the Cross-bar to open the Door. There is No Spring Action and No Spring Tension. It is the One Exit Lock of Unfailing Operation, built on Everlasting Principles for Everlasting Service.



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No. 736—Handle and Cyl.  
No. 737—Knob and Cyl.

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## MEASURING THE ABILITY OF A COMMUNITY TO FINANCE A SCHOOL BUILDING PROGRAM

(Concluded from Page 65)

### D. ANNUAL EXPENDITURES FOR SCHOOLS

Another indication of the degree to which Chillicothe supports her schools may be gotten from noting her expenditures for running expenses per pupil enrolled in the public schools. She spent \$57.64 for running expenses per pupil enrolled in 1923-24 while the median Ohio city spent \$67.16. By running expenses, we mean expenditures for such items as teachers' salaries, and expenses of operation of plant; expenditures for capital outlays are not included. Expenditures for running expenses per pupil enrolled are shown in Table XV.

Chillicothe spent \$8.35 for running expenses for schools per \$1,000 of wealth in 1923-24 while the median Ohio city spent \$8.57. Thus, it is seen again that Chillicothe is not making hardly as much sacrifice for her schools as is the typical city. Expenditures for running expenses for schools per \$1,000 of wealth are shown in Table XVI.

TABLE XIV.—PER CENT THAT INDEBTEDNESS FOR SCHOOLS IS OF VALUE OF SCHOOL PLANT, 1924-25.

City	Indebtedness for Schools	Value of School Plant	Per Cent	Rank
Cleveland Heights	\$5,477,000	\$6,700,000	81.7	1
Barberton	971,000	1,250,000	77.7	2
Martins Ferry	472,000	600,000	69.4	3
East Youngstown	1,000,000	1,450,000	69.0	4
Fremont	400,000	600,000	66.7	5
Marietta	402,000	700,000	66.0	6
Cuyahoga Falls	580,000	900,000	64.4	7
Massillon	1,340,000	2,300,000	58.3	8
Ironton	900,000	1,600,000	56.3	9
Tiffin	356,000	680,000	52.4	10
Coshocton	400,000	800,000	50.0	11
Piqua	600,000	1,200,000	50.0	12
Bellaire	668,000	1,400,000	47.7	13
Kenmore	906,514	2,000,000	45.3	14
Salem	250,000	750,000	33.3	15
Cambridge	350,000	1,084,000	33.1	16
CHILLICOTHE	206,500	740,000	27.9	17
New Philadelphia	154,000	700,000	22.0	18
Lancaster	175,000	2,000,000	8.8	19
Median			52.4	

TABLE XV.—EXPENDITURES FOR RUNNING EXPENSES PER PUPIL ENROLLED IN PUBLIC SCHOOLS, 1923-24.

City	Expenditures per Pupil Enrolled	Rank
Cleveland Heights	\$130.80	1
East Youngstown	91.18	2
Massillon	81.12	3
Piqua	77.10	4
Fremont	75.90	5
New Philadelphia	75.04	6
Tiffin	74.64	7
Lancaster	73.33	8
Martins Ferry	68.30	9
Marietta	67.16	10
Findlay	65.04	11
Cuyahoga Falls	62.79	12
Coshocton	62.50	13
Barberton	61.90	14
CHILLICOTHE	57.64	15
Ironton	55.93	16
Salem	55.33	17
Bellaire	47.36	18
Kenmore	12.61*	19
Median	\$67.16	

The State laws will permit the financing of a school building program for Chillicothe; moreover, compared with her sister cities of ap-

TABLE XVI.—EXPENDITURES FOR RUNNING EXPENSES FOR SCHOOLS PER \$1,000 OF WEALTH, 1923-24.

City	Expenditures per \$1,000 of Wealth	Rank
Martins Ferry	\$14.47	1
New Philadelphia	11.13	2
Lancaster	9.69	3
Coshocton	9.55	4
East Youngstown	9.54	5
Barberton	9.44	6
Cuyahoga Falls	9.31	7
Bellaire	9.29	8
Piqua	8.95	9
Tiffin	8.57	10
Fremont	8.56	11
CHILLICOTHE	8.35	12
Salem	8.33	13
Ironton	8.21	14
Massillon	8.25	15
Marietta	6.06	16
Findlay	5.41	17
Cleveland Heights	5.23	18
Kenmore	2.45	19
Median	\$ 8.57	

proximately the same population, Chillicothe is in a very favorable position to finance a building program. The comparisons which are favorable to her ability to finance such a program are as follows:

\*This expenditure, since it is extremely small, is surmised to be an error.

1. She has \$686 more wealth, or 11.0 per cent more, per child of census age than the median city.

2. She has a tax rate for schools, which is 1.28 mills less, or 12.2 per cent less, than the median city.

3. Her tax rate for all public purposes is 1.70 mills less, or 8.5 per cent less, than that of the median city.

4. She devotes to schools 3.7 per cent less of her total tax rate than does the median city.

5. Her indebtedness for schools per \$1,000 of wealth is \$16.98 less, or 64.9 per cent less, than that of the median city.

6. Her indebtedness for municipal purposes other than schools per \$1,000 of wealth is \$11.06 less, or 41.2 per cent less, than that of the median city.

7. Her indebtedness for all purposes per \$1,000 of wealth is \$28.73 less, or 53.5 per cent less, than that of the median city.

8. The per cent of her total indebtedness which is indebtedness for schools is 9.4 less than that of the median city.

9. Her school plant is valued at \$106 less per pupil enrolled, or 31.8 per cent less, than that of the median city.

10. She spends for running expenses \$10.52 less per pupil enrolled in the public schools, or 15.7 per cent less, than does the median city.

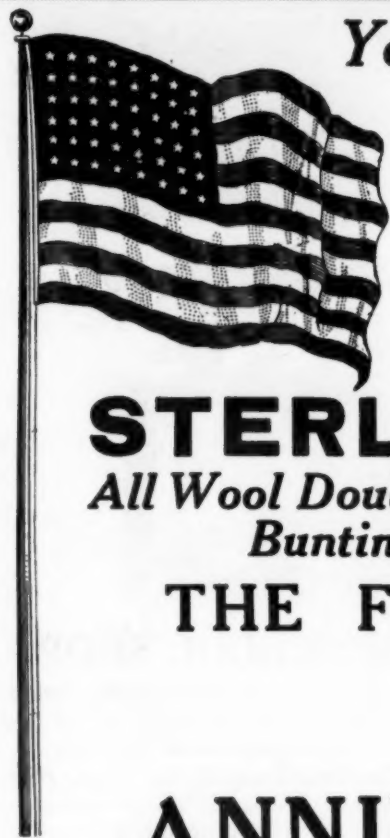
11. She spends 22 cents less for running expenses of schools per \$1,000 of wealth, or 2.6 per cent less, than does the median city.

Comparisons which are unfavorable to her ability to support a building program are as follows:

1. She has \$72.50 less wealth per inhabitant, or 4.8 per cent less, than does the median city.

2. She has \$182 less wealth per pupil enrolled, or 2.7 per cent less, than does the median city.





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## THE CONSULTING MECHANICAL ENGINEER: HIS SERVICES AND THE BOARD OF EDUCATION

(Concluded from Page 49)

8. Attic floor plan showing plumbing and electrical work.
9. Details of heating and ventilating system.
10. Details of plumbing system.

### Three-Story School

The three-story school will have two additional third floor plans, one to show the heating and ventilating, and one for plumbing and electrical work, making twelve plans in all.

4. The specifications should be printed or mimeographed and bound in book form, so as to be neatly presentable, and so that no one can tamper with them. They should be clear, simple, and direct, but so specific as to leave no doubt in the mind of the contractor concerning what is to be furnished and what kind of workmanship will be demanded.

In conclusion, it is urged that all school boards who desire to build good school buildings investigate thoroughly all applications of engineers and architects. Especial safeguard should be taken against the employment of charlatans and easy promisers. School boards are engaged in public service, and are responsible to the public for the greatest economy and the best of service in school building and equipment. The best architects and the best mechanical equipment engineers are no more expensive, so far as fees are concerned, than mediocre and inexperienced men. The best in the architectural and in the engineering profession are invariably guarded in the promises which they make and strong in performance, so far as the plans and the construction of school buildings are concerned.

### THE RETIREMENT OF TEACHERS IN SAN FRANCISCO

(Concluded from Page 51)

the individual by \$9, hence the value of the services of one teacher retired at the age of 70 is 270,000 times \$9, or \$2,430,000.

Commenting on the amount of money which society spent in order to gain the above amount, Mr. Gwinn showed that, counting fifty years of service at \$1,500 a year, the expense for the salary of the teacher was \$75,000. As the cost of teachers' salaries represents approximately three-fourths of the cost of operating the schools, society was compelled to spend \$100,000 in order to gain the \$2,430,000, which represents a good investment for society.

Teachers retired at the age of 70 are given a retiring allowance of approximately \$1,500 a year, a liberal amount in comparison with the pensions given to teachers in other communities, but in reality only six-hundredths of one per cent of the total wealth created through the efforts of the teacher.

### THE WORK OF THE SCHOOL JANITOR

(Continued from Page 56)

plates in the above building. However, this building had more brass in it than most elementary school buildings. But the amount of brass in most schools is an item worthy of consideration in any treatment of the janitor's work.

The main conditions affecting the polishing of brass are its quality and previous care. Good quality of brass can be polished in much less time and with much better results than can brass of poor quality. Its previous care, as indicated by the amount of tarnish, also will have an effect upon the time required and the results secured.

The usual appliances used are two cheese cloths, one for applying the polish and one for polishing it. Sometimes a woolen cloth is used for the latter work with excellent results.

Janitors in the schools observed used standard brands of brass polishes.

*Miscellaneous Cleaning Jobs:* Inkwells must be cleaned monthly according to the majority of rules and regulations specifications, while in practice they were cleaned only at the three

vacation periods. The former would seem to be more nearly right than practice in the schools observed.

Drinking fountains, sinks, etc., must be washed daily according to the majority of rules and regulations making specifications and this is the practice in most of the schools observed. For reasons of health and sanitation, daily cleaning is probably essential. It was found that excellent results could be accomplished either by sprinkling dry Gold Dust, Dutch Cleanser or Babbitt's Cleanser on the porcelain and rubbing it with a damp cheese cloth, or by washing the porcelain with a strong solution of one of these powders in hot water. For removing iron rust, muriatic acid was used successfully, applied with a swab. Muriatic acid in water was also used for the cleaning and polishing of inside bricks, which work is done at the three vacation periods.

Rules and regulations frequently require the removal of pencil or chalk marks, especially from toilets. These should be removed immediately upon discovery and this was done in all schools observed except two.

In 22 rules and regulations it is required that furniture, hand-rails and door knobs be disinfected. In eighteen of these requirements the frequency is specified as weekly. In practice no disinfectant was used except in toilets and in some schools for cleaning drinking fountains.

In nineteen of the 22 rules and regulations specifying the frequency for removal of waste paper, sweepings, etc., and in seventeen of the schools observed, the requirements and practices agreed in the disposal of such waste daily. Such accumulations in the basement or classrooms increase the fire hazard and in no case should be permitted to remain over night. The daily removal of sawdust and shavings from manual training rooms and garbage from domestic science rooms was required in five rules



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and regulations and was found to be the practice in all schools observed in which there were such rooms. Garbage was either hauled away by the city garbage man or burned in the furnace.

Classroom waste was disposed of in the eighteen schools studied as follows: In six schools it was burned in a chimney flue; in six, it was burned in a furnace; and in six others, it was burned in a wire burner in the yard. In every case, therefore, it was burned. This is safer than saving it for the baler.

The objection to burning waste papers in the furnace is that it causes soot to form on the pipes, thus reducing the efficiency of the coal in heating, and makes it more difficult to keep an even, steady fire, covering the live coals with the ashes from the classroom waste. The objection to burning in the yard is that the smoke is a nuisance and spoils a portion of the playground for proper use if the fire is smoldering during school hours. It also takes time and work to carry out of doors all the accumulations of waste for the day. The advantages of the chimney flue are that the waste can be burned within the building, with no danger or detrimental effects. Every school should have a flue for the proper disposal of waste. But whatever means is used, all waste should be disposed of every day, after school.

#### THE BATH HIGH SCHOOL

(Concluded from Page 63)

metrical additions to the wings as more room becomes necessary. The entrance will remain unchanged, facing the park, and giving the entire building a dignified and monumental effect.

The project for a new building was carried through not without some difficulty, since the outgrown high school was considered capable of enlargement, although at a cost slightly less than that of a new building. A general vote, however, favored a new school and a bond issue

of \$225,000 was approved. Reserving sufficient amounts for equipment, fixtures and other necessary items, it was found that there remained \$208,000 for construction; with the awarding of contracts for the construction work, it was found the cost was slightly less than \$200,000. It is probable that at least a part of the amount remaining from the fund will be used for a bronze memorial tablet, or a mural painting, as a war memorial.

The high school is a two-story-and-basement structure, with a pupil capacity of 1,020 and 530,000 cubic feet of space. It is entirely fire-proof and is built of concrete, brick and steel; the roof is of a semi-fireproof character. In addition to seven standard classrooms, five vocational rooms, eleven recitation rooms, and three administrative rooms, there are two lunch-rooms, a library, three laboratories, a study room, and other special rooms.

Two especially interesting features of the building are a combination auditorium-gymnasium with a seating capacity of more than 800, and an up-to-date dental clinic. The auditorium, which may be used for community as well as school purposes, has facilities for lectures, motion pictures and amateur theatricals, as well as for games and athletic meets when the room is used for a gymnasium. There are dressing rooms opening off the stage and a balcony is provided for the use of spectators. The dental clinic was donated by Mrs. F. M. St. John, widow of a local dentist, and is one of the most modern and thoroughly equipped in the country. It will later be adapted to the wider needs of the community.

Few indeed are the American schools which have come down through the generations with such an unbroken continuity of purpose. The Bath high school genuinely represents the public, and from the days when the total compensation for the teaching staff was only \$1,800,

down to the present, the democratic ideals of the founders have not been forgotten.

The board under whose direction the project was carried through, and which had the direction of the building activities, comprised the following: Mr. Henry W. Bowes, president; Mr. Thomas Shannon, clerk; Mr. Edwin S. Underhill; Mr. D. Beach Bryan; Mrs. Edith S. Call; Mrs. Genevieve K. Lee; Mr. Stephen S. Read. The supervision of the construction work was in charge of Mr. Palmer Rogers, architect, New York City, assisted by Mr. W. S. Clough.

#### A SCHOOL NURSE FOR THE SMALL SCHOOL

(Concluded from Page 44)

tioned. Under the existing plan, the nurse devotes at least one-half day each week to each school, taking care of individual cases, consulting with teachers and outlining plans for them to follow during the ensuing week. In addition, dental clinics are conducted at various times and publicity is given to other available clinics in nearby towns. Her weekly visiting schedule is filed in each office and she is so available at any time for special consultations or other timely work.

The plan has been so satisfactory in the past years that it was continued without an objection for the present year. It really provides the services of an experienced public school nurse in the small school for sums varying from \$250 to \$400 per year. For such reasonable fees there can be no question of getting value received. And the extreme simplicity of the arrangement makes it even more desirable.

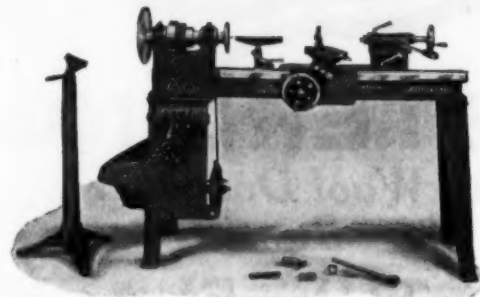
#### RULES AND REGULATIONS

—Marion, Ill. The school board has ruled that pupils entering the first grade must present birth certificates. As a result of the order, a number of pupils are excluded. It appears that pupils were being entered by not giving exact ages.

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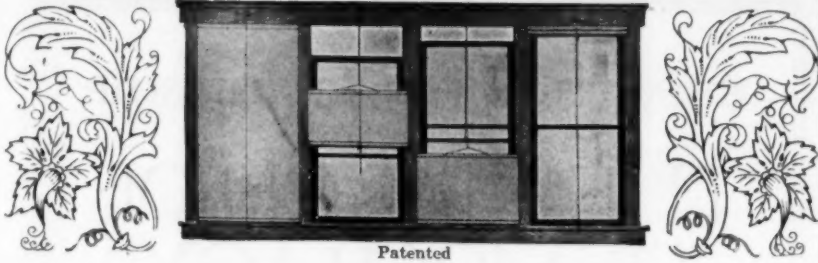


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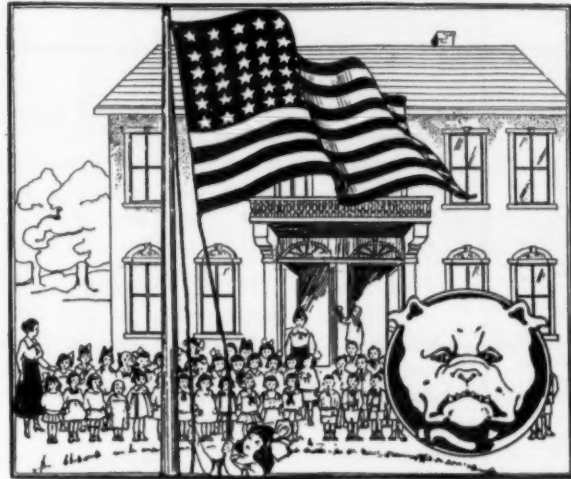
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By Austin Clark. Cloth, 276 pages. Price, \$3.00. D. Van Nostrand Co., New York.

Here a long series of animals are described in their relation to human welfare. Space is given to animals that provide food and raiment, and those that are dangerous to the comfort and safety of mankind. The author, who is connected with the Smithsonian Institute, brings out many strange animals and explains their uses.

He describes birds and beasts, and dives into the ocean to bring up a variety of strange fish. Space is given also to parasitic insects and to reptiles. Those that are a menace to mankind are enumerated. The book abounds in illustrations of animals and gives the scientific as well as their popular name. The text is written in an easy and sometimes chatty style.

### Out in the Kitchen

By James Woodward Sherman. Cloth, 133 pages. Illustrated. Price, \$0.70. Little, Brown & Co., Boston.

This is a fairy book for children. The author has animated the kitchen and common household paraphernalia. Tables, chairs, stoves, and broomsticks come to life, talk, sing, and play. Clothespins engage in a battle, the stove gets into an argument with the clock, the table entertains the dishpan and feather duster with stories, etc. The book is handsomely illustrated with colored pictures.

### American History

By Henry Eldridge Bourne and Elbert Jay Benton. Cloth bound, 674 pages. Published by D. C. Heath & Co., New York City.

The appearance of a new volume on American history usually excites the query: "In what respect can it be different from all similar histories?" Hundreds of American histories have

been written, and after all, facts remain facts. It only remains to restate them in the light of present-day views.

But, there are histories and histories, and when it comes to school histories, the writer, who is always an instructor of experience, seeks to adapt his work more closely to student needs as he views them and to educational aims as he understands them.

The present volume for high school use, begins with the first attempts at colonization of the new world and ends with a discussion of the present industrial, political, and economic situation. The emphasis is strongly on the social and economic developments and only very lightly on the military story and war events. The period of discovery is omitted from the main text and the colonial history is reduced to the salient features of that period. The largest measure of attention is given to the history of the United States from their actual formation to the present time. The later period, including the world war and international relations are adequately dealt with.

It is interesting to note that the book is most satisfactory in those chapters which take up political and economic facts and happenings. The accounts of social developments are in some places open to controversy, mainly because only some of the leading developments are touched upon and the concomitant movements are not evaluated or given due credit. This is especially true of educational, religious, and social welfare developments.

### Comparative Effectiveness of Some Visual Aids in Seventh Grade Instruction

By Joseph J. Weber. Cloth, 129 pages. Published by the Educational Screen, Inc., Chicago, Ill.

The subject of "visual instruction" has been promoted in recent years with considerable energy, and the process of promotion has been characterized by a lack of light on the very important point of the value of visual methods as compared with other methods and aids in instruction. The difficulty has been that commercial agencies, who know but little about education, have pushed their products and have expected that the use of the word "educational"

as applied to films, prints, etc., would magically adapt them to school uses and offer an easy, cheap outlet for their products. The activities especially of the large movie producers have not aided the visual method, but have rather caused distrust in the minds of schoolmen, and have actually injured the very excellent work of a few serious producers who are putting forth genuine instructional material.

The present book is a real contribution to the subject. The author has worked out four experiments intended to determine (a) the value of moving pictures in combination with verbal instruction; (b) the value of a simple drawing (from oral description in creating a composite visual image; (c) the value of a diagram in developing a relatively abstract concept; and (d) the comparative effectiveness of four methods of presentation as applied to material in the same subject and of the same importance and interest. The conclusions drawn from the experiments, presented in elaborate tabulations, all point to the positive value of visual aids, but make clear that they are not cure-alls, or that they will entirely supplant the older oral and written methods of teaching. As the author says:

"The most promising soil for the growth of visual instruction is undoubtedly the elementary school; and the most important function of visual aids is that of being a passive source of information, satisfaction, and inspiration in the solution of problems and the execution of pupil projects.

"Since visual aids provide vicarious experience, their value increases with lack of experience on the part of the learners. Consequently, the more limited a child's training is, the greater may be the potential effectiveness of the picture or other aid.

"But one caution must be reiterated. Viewing a picture does not necessarily affect learning. Seeing is merely a fraction of the learning process. Learning is the effect of thinking, feeling, doing—in brief, cerebration. So, unless the visual impression is seized upon vigorously by discussion, questioning, and pupil expression, it has much less value than is commonly believed.

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"Therefore, the biggest task in the field of visual instruction now is the actual elaboration of a specific methodology. Every subject in the elementary curriculum, and every fundamental element that can be elucidated with either a visual scene or a visualized scheme, will have to be correlated with one or more visual aids. And every teacher will have to know how to secure, systematize, and utilize most economically the various aids and be an expert in building the pupils in their most effective use."

### Physiological Chemistry

By C. J. V. Pettibone. Cloth, 404 pages. Price, \$3.25. The C. V. Mosby Co., St. Louis, Mo.

This is the third edition of the work with added material in both theoretical and laboratory portions of the text. After a brief introductory, the author deals with the subject of physical chemistry in its relation to physiological chemistry and describes the several base materials. He then discusses fats and proteins. Also the subject of digestion in all its forms, mouth, stomach, and intestines, is treated.

The second part goes into the practical laboratory work, and outlines in detail experiments and analyses. Complete laboratory directions, lists of chemicals, etc., are provided.

### Elementary and Intermediate Algebra

By Arthur Schultze and Wm. E. Breckenridge. Cloth, 461 pages. The Macmillan Company, New York.

The book is a revision of Professor Schultze's earlier textbook for secondary schools. In the revision the subject matter has been changed or rearranged, wherever necessary, to conform to the report of the National Committee on Mathematical Requirements and to the requirements of the New York State Regents and of the College Entrance Examination Board. New material has also been introduced to make algebra more interesting and intelligible to the student.

Chapter I, How Letters Are Used as Numbers, is certainly one of the best chapters that have been written on this subject. The student is asked to work out a simple project, such as measuring the height of a room or laying out a

baseball diamond and methods of procedure are clearly explained. From such simple operations the beginner is introduced to the language of algebra and the making of formulas and equations. Then he is shown the simple use of graphs. The theory of negative numbers is very cleverly shown by the "story of the two tramps."

### A School Dictionary of the English Language

Edited by Harry Morgan Ayres. Cloth, 454 pages, illustrated. Published by Silver, Burdett & Co., Newark, N. J.

The proposition that a dictionary shall have distinct teaching value and shall be adapted especially to school use may not appeal to the average teacher except upon consideration and study. It is readily apparent that a dictionary for the upper grades and the high school need not contain all the words found in an unabridged or even in a collegiate dictionary, but it is not so clear that a book can do more than present accurate, clear definitions and pronunciations and include all commonly used words.

The present book does far more than any previous school dictionary we have examined. In scope, in arrangement, in emphasis, it is a school book. The list of words is based on the well known Thorndike Teacher's Word Book, which has been used to insure the inclusion of all words usually used by educated people. The words are arranged in related groups, which economize space, greatly facilitate the natural finding of words and bring out the relationship of words for etymological study. Another useful deviation from the conventional is the grouping of derivations even though the strict alphabetical or technical order is violated. Finally, the natural purpose of the pupil in consulting the dictionary is considered paramount and the three elements: (a) the meaning of a word, (b) its spelling, and (c) its pronunciation and the stressing of the proper syllable are the basis for arranging the word paragraphs.

The typography of the book is clear and the paper and binding are exceptionally stout.

### A Course in Sheet Metal Work for Junior High Schools

By J. W. Bollinger. Cloth, 96 pages, illustrated. Published by the Bruce Publishing Co., Milwaukee, Wisconsin.

This simple text is intended to serve as an introduction to sheet metal work in the junior high school. The elementary processes are applied to simple problems which can be used in the household. Sufficient supplementary information on materials and on the mathematics of the subject are added to round out the course. A minimum of tools and machines is required so that the work can be introduced in any small school.

### Little Ugly Face

Florence C. Coolidge. Cloth, 182 pages. The Macmillan Co., New York City.

This group of twenty-five Indian stories has been collected by the author during extended visits to Indian reservations in Michigan and Arizona. The tales are based in part upon Indian folk lore and in part on Indian customs and have a charm that makes them readable even by adults. The language and content will make the stories especially useful in the lower grades.

### Legend of the Sleepy Hollow

Paper, 68 pages. Price, 30 cents. Isaac Pitman & Sons, New York, N. Y.

Another of the very useful Pitman shorthand reading books. The present edition is written in the advanced state of Pitmanic shorthand and includes a complete key.

### The Branom Practice Tests in Geography

By M. E. Branom. Paper, 255 sheets. Published by The Macmillan Co., New York City. Intended for use in the upper grades.

### PUBLICATIONS RECEIVED

**Effect of Practice on Intelligence Tests.** By H. N. Glick. Price, thirty cents. Issued by the University of Illinois, Urbana. The present report serves to call attention to the need for explicit recognition and study of the assumptions implied in educational tests. The report discusses the practice materials, the administration of the experiment, the attitude of the subjects, and the statistical treatment of the data.

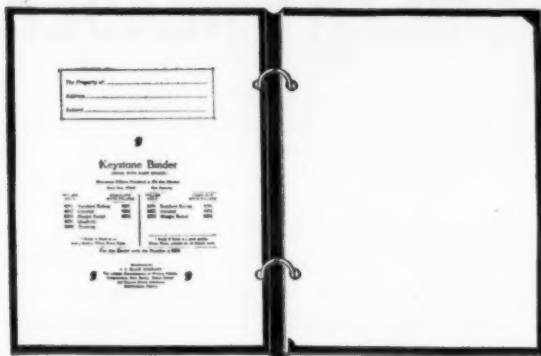
**Effect of Population Upon Ability to Support Education.** Prepared by Harold F. Clark, of Indiana University. A careful survey of the literature of the discussion discloses that one of the important elements determining school cost has received no adequate attention. Of all the

(Concluded on Page 137)



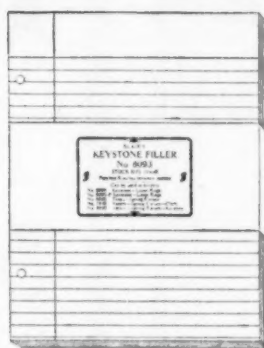
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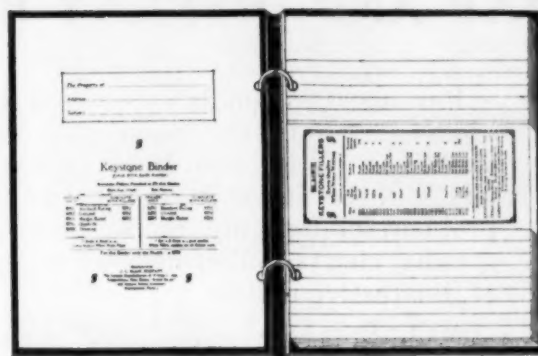
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(Concluded from Page 134)

factors determining the cost of education, the effect of the number of children has been most inadequately treated. This discussion is an attempt to indicate, or to measure the importance of this factor. The present article discusses the facts regarding population conditions in the United States, defense of the formula, interpretation of the facts, reliability of the basic data, and use of the formula.

**Annual Report of the Commissioner of School Buildings of the Board of Education of St. Louis, Mo., for the year 1924-1925.** Prepared by R. M. Milligan, commissioner of school buildings. The pamphlet contains photographs and a description of the newly completed Roosevelt high school.

**Special Disabilities in Learning to Read and Write.** By Elizabeth E. Lord, Leonard Carmichael, and W. F. Dearborn. Harvard Monographs in Education, issued by the Graduate School of Education, Cambridge, Mass.

**Measurement of Ability in the Modern Foreign Languages.** Bulletin No. 1, Criteria for standards of achievement tests and directions for their proper administration; Bulletin No. 2, Problems for investigation by the Modern Foreign Language study. Issued by the Modern Foreign Language Study, under the direction of the chairman.

**The Training of Dental Hygienists.** By James F. Rogers. School Health Studies No. 9, May, 1925. Issued by the United States Bureau of Education, Washington, D. C. With the growing recognition of the importance of good teeth, a demand has arisen in recent years for a special worker to relieve the dentist of the task of cleaning teeth and to serve in the capacity of teacher of oral hygiene to children. The demand for such workers has been followed by the establishment of special schools and courses for their training, and the passing of laws governing their education and licensure. The Bureau of Education, as a result of a special study, finds that ten institutions now offer instruction in this subject, and a number of other schools of dentistry are arranging special courses for these workers. The pamphlet describes the work of the dental hygienist, gives the hours of work, the salary

and entrance requirements, together with the length of the course to be taken and the subjects for study. Those who perform the work of the dental hygienist are required to possess a license the same as dentists and physicians. A total of 21 states now license properly trained dental hygienists.

**Regulations of the National Board of Fire Underwriters for Electric Wiring and Apparatus.** Edition of 1925. Issued by the American Engineering Standards Committee.

**Principles Relating to the Engineering of Specific Habits.** Educational Research Circular No. 36, October, 1925. By George W. Reagan. Issued by the University of Illinois, Urbana.

## SCHOOL POLICY FOR NEW YORK CITY

In view of a new administration coming into power in New York City, there is some speculation as to its effect upon the school interests. The Public Education Association of that city lays down a school policy which it believes ought to be observed.

It primarily holds that partisan politics must be eliminated from school management and that all appointments and promotions in the school system must be made upon the merit basis, and adds: "Under the law, responsibility for appointing the board of education and for financing the school is placed upon the municipal government. Despite the fact that public education is in all other respects conceded to be legally a state function, these two local responsibilities actually place the school system under the control of the city.

"This measure of local control necessarily calls for leadership by the political party in power. The wisdom of this leadership determines largely the efficiency of the schools. Where this power is construed as an opportunity for patronage, or for the furtherance of schemes to enhance personal or partisan ambitions, educational values are ignored and the schools degenerate into mere pawns in a sordid political game. Where this power is regarded, however, as an obligation to provide the highest degree of professional and business management the city can afford, educational values become paramount, merit alone prevails in making appointments, and the ideal of disinterested, ex-

pert service is substituted for that of political aggrandisement.

"There is a crying need for the latter type of leadership to free the schools from their present predicament. It requires wisdom and courage, no doubt, for a political party to be non-partisan where the annual expenditure of over a hundred million dollars and the appointment and promotion of thirty thousand employees are involved, but if these virtues should ever be exercised, it is surely when the welfare of a million children is at stake.

"The incoming mayor will hold the key to this situation. He will appoint the members of the board of education, which makes or breaks the school system. If he is wise, he will select a non-partisan board, composed of men and women of high character and broad experience who are capable of understanding and providing for the educational requirements of a great cosmopolitan community. He will choose persons who realize that they can best serve the schools by formulating and insuring the execution of broad policies rather than by wandering hopelessly in a maze of administrative details that can best be left to the expert staff. With such a board, the prospect of success will be bright as long as the mayor keeps hands off politically and encourages independent and disinterested action."

## EDUCATIONAL PROBLEMS IN ST. LOUIS

The new school year was opened by the St. Louis school authorities with a general meeting of the teachers and principals. The principal speaker of the occasion was Supt. John J. Maddox, who discussed current problems which deserve the attention of all members of the staff. In part, Mr. Maddox said:

"The forward movement in education has been due in large measure to the results of research of one kind or another. Significant changes have taken place because professionally-minded men and women have addressed themselves to the finding and interpreting of facts. It is no less important to approach the problems of education scientifically than it is to approach the problems of business scientifically.

"The housing program is a perennial one in the school system—the location and construction of new buildings, the determination of the

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size of rooms, the lighting. Fortunately, in St. Louis, we are accumulating accurate information which enables us to talk intelligently on school building needs.

"Whenever a position becomes vacant in the St. Louis schools, or when a new position is created, it is desirable to select the best person available for the position. For this purpose, it is necessary to have definite and comparable measurements of qualification, and to make decisions upon standard scores of merit which can be definitely calculated. Such scores are now used in the superintendent's office in the selection of personnel.

"The public's investment in education must bring the greatest possible returns, and the measurements of pupil achievement is one of the important checks by which these returns may be evaluated. Achievement testing is a constructive device looking toward better performance, and is not a probe searching out the spots of inefficiency.

"The schools have been taken largely on faith and we believe that this confidence has been justified, but a complete coordination between the public and its schools comes from an enlarged understanding of the school's purposes and of its methods of operation.

"It is important that the public understand that in the business of education, the bias of personal opinion must give way to scientifically derived facts. The American public is peculiarly responsive to fact but it is peculiarly suspicious of the whim of public opinion."

#### Opposes School Board Ward Representation

The board of education of Milwaukee is elected by popular vote and its members represent the city at large. A movement has been inaugurated whereby ward representation is to be substituted for representation at large.

The City Club of Milwaukee in opposing the change says: "It is the function of the school board to determine school policies and it is the function of the superintendent and his staff to carry out these policies and to administer the schools under the board's general direction.

"The proposed district system which is the system of small territorial representation with one or more schools in each district will encourage each director to consider the schools, principals and teachers in his district as "his

schools," "his principals" and "his teachers." The tendency will be for him to seek to control the appointments of the teachers and principals in that district. Looking upon the district as his little domain, he will take up complaints of parents on matters of minor classroom discipline and the professional control of teachers and principals in their work will be invaded by a non-professional authority. The history of ward representation of previous years in Milwaukee in school affairs bears this out. The functions of the superintendent and workers should not be encroached upon by individual directors."

In the following cities the board of education members are elected at large: Detroit, Cleveland, St. Louis, Boston, Pittsburgh, Los Angeles, Milwaukee, Cincinnati, Minneapolis, Kansas City, Seattle, Indianapolis.

In the following cities, the board of education is appointed by the mayor: New York, Chicago, Baltimore, Newark. In San Francisco the mayor nominates, subject to confirmation or rejection by popular vote. The Philadelphia board of education is appointed by the court. In Washington, D. C., appointments are made by the Supreme Court judges.

—The National Tuberculosis Association has announced its annual Christmas seal campaign for the year 1925.

#### Christmas Seals 1925



The Association in opening its campaign, points to the fact that the germs of tuberculosis are everywhere, and that everyone is constantly threatened by the disease. It has been proven that the disease can be cured, and the organized warfare now being carried on by the tuberculosis crusade, has been effective in cutting the death rate from the disease in half.

The sale of Christmas seals each year has been a large factor in "putting the campaign across" and a plea is made that everyone buy Christmas seals in an effort to save a life.

A Christmas seal on a parcel, letter or greeting card will carry these cheery messengers of health to all the world.

#### SCHOOLHOUSE DEDICATIONS

—The new \$30,000 school at Milburg, Mich., was dedicated with appropriate ceremonies. Dr. Ernest Burnham of the Kalamazoo Normal, and B. T. Eggert, county school commissioner, were the speakers.

—Band music and speech making characterized the opening of the new high school at Burlington, Washington. Dr. Henry Suzzallo of the University of Washington was the principal speaker. Others who delivered addresses were Earl W. Morrison of Morrison and Stimson, architects of Seattle, and Harrison F. Heath, superintendent.

—The new school at Haller Lake, Seattle, Washington, was opened by President L. A. Bird of the school board. Other speakers were A. S. Burrows, county superintendent, and board members.

—The new \$600,000 junior and senior high school just completed at Lebanon, Pa., was dedicated with an address by Dr. Francis B. Haas, state superintendent. The school was donated by M. E. Hershey, the chocolate manufacturer.

—The new \$60,000 Hughson grammar school has recently been completed. It is two stories high, contains twelve rooms, and accommodates 425 pupils.

#### RATE AND CAUSES OF TURNOVER OF IOWA TEACHERS

(Continued from Page 54)

<sup>12</sup>Rodgers, B. D., Computation of Labor Turnover, Industrial Management, 56, p. 243, September, 1919.

<sup>13</sup>Mogowan, H. H., Computation of Labor Turnover, Industrial Management, 56, p. 241, September, 1918.

<sup>14</sup>For a very recent bibliography of 350 references concerning turnover of personnel in industry, see Industrial Management, 60, No. 2, pp. 103-4, February, 1925.

<sup>15</sup>Hackett, J. D., Labor Turnover Chaos, Management Engineering, 3, p. 347, December, 1922.

<sup>16</sup>Adams, J. E., Common Sense Attack on Turnover, Industrial Management, 52, p. 298, November, 1921.

<sup>17</sup>Lewis, E. E., Personnel Problems of the Teaching Staffs, p. 337, 1925.

<sup>18</sup>Lewis, E. E., Personnel Problems of the Teaching Staffs, p. 335, 1925.

<sup>19</sup>Brissenden and Frankel, Labor Turnover in Industry, p. 13, 1922.





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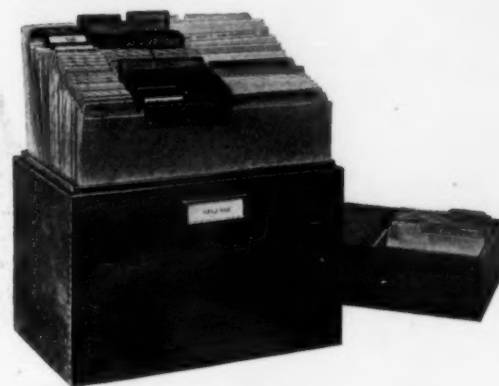
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## OFFICE EQUIPMENT

### DESIRABLE TRAITS AND QUALIFICATIONS AND UNDESIRABLE TRAITS AND DISQUALIFICATIONS OF CITY SCHOOL BOARD MEMBERS

(Concluded from Page 36)

"interest in schools," "patron—have children in schools," each five times.

Two letters, one from an eastern state, the other from a southern state, indicate how such an inquiry appeals to some board members:

#### Letter from an Eastern State

"You have assigned to me an impossible task. I should like to comply with your request but am frank to say that I cannot do so. I could not attempt to answer your questionnaire. I think it would be unfair to myself and to the members of the board of education who are, I feel, a hard working well equipped body. We have the frailties that are characteristic of humans on any board, no more nor less than the average civic body."

#### Letter from a Southern State

"I am frank to confess that I do not know just what you desire, and therefore do not fill out the blank form that you enclose.

"I do not see that to school board members any other test should be applied than is usual no doubt, however, that one supreme qualification should be a devotion to education and ability to advocate the necessity thereof to the powers that hold the purse strings."

### THE LEGAL RELATIONSHIP THAT SHOULD EXIST BETWEEN THE SUPERINTENDENT AND THE BOARD OF EDUCATION

(Concluded from Page 38)

general agreement on principles of school administration, and the greater tendency toward a transient population—all suggest that the trend of the times is toward a more effective state leadership than Illinois has yet vested in its Department of Public Instruction. However, until the entire school system of the state shall be reorganized, the interest of city school systems in this phase of the question would

probably be limited to such subsidiary questions as bringing about a more uniform system of accounting and reporting school data, and state approval of school curricula.

We have seen that the law governing the administration of city school systems is a growing thing, that in Illinois the basic law dealt almost entirely with a pioneer, rural condition, that the development and improvement of city school systems was promoted through special legislation, and that certain fundamental principles were evolved to a stage where they were generally accepted for all the schools of the state. We have seen further that the chief general legislation defining the duties of boards of education was passed 53 years ago and that Illinois legislation for the general control of schools in the last quarter of a century has not kept pace with the improved procedure in the more progressive states.

It is true that the chief relationships proposed in this paper are already in force in many Illinois cities; but it is also true that in a large number of cases they are not in operation. The point at issue is whether or not those who have already attained the desired goal locally will help to make the procedure that has been demonstrated as good in their own cities usable for all cities of the state. Such legislation as is herein proposed looks toward developing a more highly skilled profession of superintendency than we have obtained, toward a greater stability in city school administration, to an improved service to the public.

For, after all, law is but a rule of service. We perform our administrative acts in view of the rules that have been defined in law. Our only question is whether we may not refine the rules and thereby improve our practice. Of one thing we may be certain—the times are changing. Changed conditions demand new organization, new machinery for meeting the special

needs of the period. The question at issue is whether or not the time is not ripe for the men and women most interested in the control of our city schools to take steps to provide a better administrative organization and procedure for the use of the generation that is to follow us. "Social evolution is of infinite complexity and indefinite duration; law is no more than its protective armament."

<sup>1</sup>For evidence of the influence of the older states upon the development of an educational program in Illinois, see discussions of education in the Illinois House and Senate Reports covering the period 1845-1855.

<sup>2</sup>Private laws of the state of Illinois, passed at the Nineteenth General Assembly, January 1, 1855.

<sup>3</sup>"AN ACT to establish free schools in the city of Ottawa, and to amend an act entitled 'An act to charter the city of Ottawa.'" Private Laws of Illinois, 1855, pp. 220-226.

<sup>4</sup>"AN ACT to establish and maintain a system of free schools. Laws of Illinois, Public and Private, 1855, pp. 51-91.

<sup>5</sup>"AN ACT to establish and maintain a system of free schools. Laws of Illinois, 1871. (In effect July 1, 1872.) Sec. 80, pp. 737-738.

<sup>6</sup>The Illinois School Laws, 1872-1883, pp. 54-56, Sec. 80, Seventh paragraph.

<sup>7</sup>The School Law of Illinois, Circular No. 157, pp. 51-52, Sec. 127, Seventh paragraph.

<sup>8</sup>A letter received from Francis G. Blair, State Superintendent of Public Instruction, Springfield, Illinois.

<sup>9</sup>For reference to the statutes supporting the statements made in proposals, see Morrison, The Legal Status of the City Superintendent, Chapters III, IV, pp. 40-98, Warwick & York.

<sup>10</sup>Cubberley, Public School Administration, p. 87.

<sup>11</sup>Gore, The Trail of the City Superintendent, N. E. A. Proceedings, 1900, p. 215.

<sup>12</sup>Montana School Laws, 1917, p. 89, Sec. 1500.

<sup>13</sup>Illinois School Laws, 1921, No. 157, p. 112, Sec. 4.

### WHAT ABOUT THE MARRIED TEACHER?

(Continued from Page 42)

I have personally come in contact with a great number of school teachers, both married and unmarried. I have heard them talk "shop" when they didn't know that I was paying the slightest attention to what they were saying. The talk among the unmarried teachers has been of their work, their schools, the children, and how they could best do good for their schools and their community. Very little has the talk turned to dress, styles, vacations, etc. Their work was uppermost in their minds, they



Riverside High School, Wichita, Kansas Lorentz Schmidt, Architect

### FLEXIBILITY

The installation shown above is a good illustration of the flexibility which may be had in a school plant by the use of ACME ROLLING PARTITIONS.

In this particular instance the center one of three rooms is used for study purposes. Recitations are held in the rooms on either side at the same time. When space is required for general assembly the partitions are rolled up out of the way and the posts removed—the entire operation taking but a few moments.

ACME VERTICAL PARTITIONS FOR LARGE OPENINGS

Send for Catalog "S."

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Manufactured by  
UNION BLIND & LADDER CO., INC.  
3538 Peralta St. Oakland, California



## A Modern Plant —

### Specializing In Stage Scenery

Our modern, four-story, day-light plant is devoted exclusively to the production of stage scenery and curtains. Built especially for this purpose it provides facilities for proper efficient handling of this work.

Specially arranged scaffoldings, running the full length of the four stories, handle even the largest theatre curtains with ease. Perfectly balanced they can be moved at will. The artists working on permanent bridges hold their same positions, securing a constancy of perspective im-

possible of attainment, under old-fashioned methods.

And this same thoroughness prevails throughout the entire plant. Curtains and settings when shipped are accompanied by clear complete working drawings that any carpenter can complete the work of erection.

Our two generations of "knowing how" are at your service. Ask us how we can help you—no obligation on your part.

Volland Service Includes Complete equipment for the stage—Velour Draperies, Fabric Settings, Painted Scenery, Rigging and Lighting Effects.

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were living their work. Among the married teachers it was vastly different, the latest styles, the newest model auto, the most recent show hit, where to go on next year's vacation, etc. etc. They discussed almost everything except their work and when that was mentioned it was discussed chiefly from the salary point of view, the number of hours they had to put in, the amount of work that was expected of them, and so on. With them their school work was not uppermost in their minds, it was a secondary consideration, a means by which they were enabled to earn extra money to satisfy their own personal and selfish ends.

Vastly different is the influence of a teacher who teaches for such motives, and the influence of the teacher who gives her best efforts to the work before her.

Which variety of teacher do we want in our public schools? Which variety of teacher do we want moulding the opinions of the youth of today who will be our citizens and our civilization of tomorrow? This question of the married teacher is a vital question in our educational life today. It is a question the proper solution of which means much in the advancement of our education.

Through many years as a school official I have come in contact with and studied this question of the married teacher and I cannot help but feel that when all things are considered, when the advantages of both varieties of teachers are carefully weighed in the balance, the scale dips decidedly in favor of the unmarried teacher.

For the sake of the schools of today, for the sake of the ideals of the youthful school children, for the sake of the old-fashioned home life which is the very backbone of our American civilization, for the sake of the America of the future, I believe that the married teacher

should be removed as a factor and an influence in the public school systems of this country.

### A STUDY OF SEX DIFFERENCES IN MENTAL DEVELOPMENT AS REVEALED BY GROUP INTELLIGENCE TESTS

(Concluded from Page 48)

Charts 2, 3, and 4 are based on a smaller group of pupils, and we give them because they are based on retests of identical cases of 187 in number one year apart. These same pupils form a part of the 1133 cases of Chart 1.

Chart 2, even though it is based on different tests, shows considerable constancy for the same group from one year to another. The two tests employed at this one year interval show a correlation coefficient of .814 ( $\pm .0264$ ). In general, all of our retestings show a fairly high constancy in I.Q. for any given group of the two sexes. As we have said before, any sex difference or any adolescent spurt is concealed in any median curve because the period of acceleration and retardation comes at different periods for the two sexes which the last two columns in Table I so clearly bring out.

We reproduce charts 3 and 4 to show that where the two median curves of Chart 2 run approximately even, the individual sex curves bend sharply, showing for this small group results in general similar to the curves of our large group of 1133 in Chart 1. As in Chart 1, we find high points for girls around nine and twelve, and for boys around ten and eleven and thirteen.

It is especially significant that where in 1922 the girls were superior to the boys at twelve we find these very same cases in 1923, when they are thirteen years of age, in a reversed position with the boys superior to the girls, showing twelve as a decidedly high point for girls and thirteen a decidedly high point for boys. These

retestings of the separate sexes furnish additional proof of adolescent differences.

#### Summary

1. Our tests which cover a period of three years show that the I.Q. data for any given group tested with group intelligence tests shows a considerable constancy and permanence for the mixed group. This constancy for the group is sufficient for practical purposes.

2. There is a considerable sex difference revealed by group testing. This difference is especially pronounced around the years of adolescence and several years previous, or around the ninth year and then again from the twelfth to the fifteenth years.

3. We cannot thoroughly evaluate mental growth differences without a comparison of the boys' and girls' curve with the mean, as well as a comparison of the two in their absolute relation.

4. There is an evident correlation in mental and physical growth, the degree of which is impossible to determine because of the lack of an adequate measuring unit.

5. There is a constant superiority in I.Q. for girls for all life ages where our cases are entirely unselected. This difference reaches a maximum of 7.18 I.Q. points.

6. Although the girls' mental growth curve is more irregular than the boys we yet find considerably more standard deviation for the boys. This appears in a comparison of separate life ages as well as in a comparison of both sexes for all ages.

7. There is a high correlation of such group tests as the Illinois, Terman, and Otis group tests, varying from .814 to .853.

8. There is considerable injustice done at certain ages in using group tests such as we have just mentioned on mixed groups. It would seem desirable for certain purposes to restandardize tests for the separate sexes.



# School Board Journal

## DIRECTORY OF EQUIPMENT AND SUPPLIES

The names given below are those of the leading and most reliable Manufacturers, Publishers and Dealers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms.

(Continued from Page 151)

### SAFETY STAIR TREADS

American Abrasive Metals Co.

### SAFETY VAULTS

Shaw-Walker

### SANDERS—DISC AND SPINDLE

J. D. Wallace & Co.

### SASH OPERATING DEVICES, STEEL

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### SASH, STEEL

Detroit Steel Products Company  
Lupton's Sons Co., David

### SASH, VENTILATING

Detroit Steel Products Company

### SAWS—CIRCULAR, BAND

J. D. Wallace & Co.

### SCIENTIFIC APPARATUS

Chicago Apparatus Co.

Rowles Co., E. W. A.

### SCREENS—PICTURE

Trans-Lux Daylight Picture  
Screen Corp.

### SCRUBBING EQUIPMENT

Finnell System, The

### SHOWERS

Clow & Sons, James B.  
Hoffmann & Billings Mfg. Co.

### SIRENS

Federal Electric Company, The

### SKYLIGHTS—METAL

Lupton's Sons Co., David  
Milwaukee Corrugating Co.

### SPRAY-PAINTING EQUIPMENT

DeVilbiss Mfg. Co., The

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Kansas City Scenic Co.  
Novelty Scenic Studios  
Tiffin Scenic Studios  
Twin City Scenic Company  
Volland Scenic Studios, Inc.

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Norton Company  
Safety Stair Tread Co., The  
Stedman Products Co.

### STATIONERS

Blair Company, J. C.

### STEEL CASINGS—Doors, Windows

Milwaukee Corrugating Company

### STEEL SASHES

Detroit Steel Products Company

Lupton's Sons, David

### STEEL STORAGE CABINETS

Durabilt Steel Locker Co.

Medart Mfg. Co., Fred

### STEEL WINDOWS

Detroit Steel Products Company

Lupton's Sons Co., David

### STOOLS, STEEL

Angle Steel Stool Company

### SWEEPING COMPOUNDS

Robertson Products Co., Theo. B.

### TABLES

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Gunn Furniture Company

Library Bureau

Rinehimer Bros. Mfg. Co.

### TABLETS

American Tablet & Stationery Co.

Blair Company, J. C.

### TALKING MACHINES

Victor Talking Machine Co.

### TEACHER AGENCIES

Natl. Assn. of Teacher Agencies

Teacher Agencies Directory

### TELEPHONE SYSTEMS

Federal Electric Co., The

Federal Tel. & Tel. Co.

### TEMPERATURE REGULATION

Buffalo Forge Company

Johnson Service Company

National Regulator Company

### THERMOMETERS

Wilder-Pike Thermometer Co.

### TOILET PAPER AND FIXTURES

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Bermes Company, Daniel

National Paper Products Co.

Palmer Company, The

Robertson Products Co., Theo. B.

### TOILET PARTITIONS

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Sanymetal Products Company

Structural Slate Company

Vitrolite Company

Weis Mfg. Co., Henry

### TOWELS

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Brown Company

National Paper Products Co.

Palmer Co., The

Robertson Products Co., Theo. B.

### TYPEWRITERS

Underwood Typewriter Company

### VACUUM CLEANING SYSTEMS

Spencer Turbine Company, The

### VACUUM PUMPS

Nash Engineering Company

### VALVES—FITTINGS

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### VARNISHES

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Globe Ventilator Company

Knowles Mushroom Ventilator Co.

Lupton's Sons Co., David

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Bayley Mfg. Company

Buckeye Blower Company

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Dunham Company, C. A.

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Nelson Corp., The Herman

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Columbia School Supply Co.

Greenfield Tap & Die Corporation

Sheldon & Company, E. H.

Wallace & Co., J. D.

Wiese Laboratory Furniture Co.

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Monarch Metal Products Co.

### WINDOWS—ADJUSTABLE

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Detroit Steel Products Company

Lupton's Sons Co., David

### WINDOW FIXTURES

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Williams Pivot Sash Company

### WINDOW GUARDS

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Badger Wire & Iron Works

Logan Co. (Formerly Dow Co.)

Stewart Iron Works Co., The

### WINDOWS—REVERSIBLE

Detroit Steel Products Company

### WINDOW SHADE CLOTH

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Western Shade Cloth Company

### WINDOW SHADES

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Athey Company

Columbia Mills, Inc.

Draper Shade Co., Luther O.

Maxwell & Co., S. A.

Ordinator Company

Steele Mfg. Co., Oliver C.

Wagner Awning & Mfg. Co., The

Western Shade Cloth Company

### WINDOW SHADE HOLDERS

Allen Shade Holder Co., The

### WINDOW SHADE ROLLERS

Columbia Mills, Inc.

Hartshorn Company, Stewart

Western Shade Cloth Company

### WINDOWS, STEEL

Detroit Steel Products Company

Lupton's Sons Co., David

### WIRE GUARDS

Badger Wire & Iron Works

Cyclone Fence Co.

Logan Co. (Formerly Dow Co.)

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### WOODWORKING MACHINERY

J. D. Wallace & Co.

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## After the Meeting



### A Poser

Dick was very proud of the fact that he was now among those scholars who were considered old enough to have imparted to them some of the rudiments of astronomy.

This study took Dick's fancy, and he loved to bring some of his newly acquired information home.

"Do you know," he said, one star-lit evening to his little sister, "that that little star over yonder is very much bigger than our world?"

"Then," she asked, "why doesn't it keep the rain off?"—Chicago News.

### Tales Out of School

(From the Forum, published by the pupils of the Nicholas Senn high school, Chicago.)

President (in meeting)—"You are out of order!"

Sweet Young Thing—"Return the nickel, please."

Teacher—"This is the third time you've looked at George's paper."

Pupil—"Yes, ma'am, he doesn't write very plain."

### Too True

First College Graduate—"Some morning I will wake up and find myself famous."

Second College Graduate—"Yep, but you will have to lose a lot of sleep first, old top."—Chicago News.

### Did He Can It?

Soph (to frosh who had written his first theme)—"What's the matter?"

Frosh—"Why I wrote a flowing theme on milk—and the professor's condensed it."—Lafayette Lyre.

### Oh, Horrible Habit

"When I was home I stayed in every night, getting educated."

"Listening to the radio, eh?"

"No. My sister was home from Vassar and she talks in her sleep."—Penn State Froth.

### Obstinate

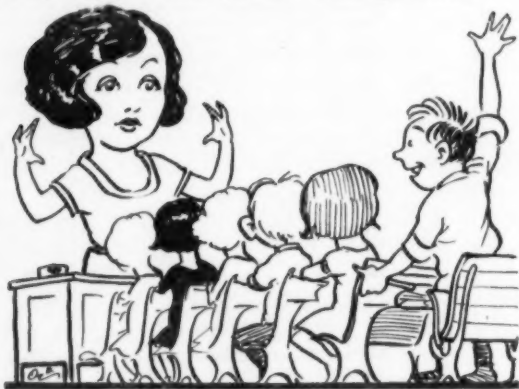
Teacher (during recess): Now, children, don't quarrel. What's the matter?

Willie: We're playing airplane, and Minnie won't jump off the fire-escape with your umbrella.

The absent-minded professor who unconsciously donned his daughter's spring hat instead of his own chanced to pass a mirror. "How remarkable it is," he said, "that the first touch of spring immediately transforms humanity into smiling, happy beings."—Chicago News.

"Personally," said the young college girl, "I'm going to have a go at literature, mother. No nonsense about artistic ideals. I'm going to write for money."

"My dear," said her mother, "you've been doing that for four years."—Chicago News.



"William," asked the teacher of a rosy-faced English lad, "can you tell me who George Washington was?"

"Yes, ma'am," was the quick reply.

"He was an American gen'ral."

"Quite right," replied the teacher. "And can you tell us what George Washington was remarkable for?"

"Yes, ma'am," replied the little boy. "He was remarkable because he was an American and told the truth."



### CELEBRATE FIFTIETH ANNIVERSARY

The Holtzer-Cabot Electric Company, of Boston, Mass., has just issued a beautifully illustrated pamphlet in commemoration of the fiftieth anniversary of its establishment. The firm was founded in 1875, by Charles W. Holtzer, president of the organization, and during the last fifty years has steadily grown in size and scope, until it now occupies a six-story building and maintains eight branch offices for the handling of its electrical devices.

Mr. Holtzer came to the United States in 1866, after serving an apprenticeship as a machinist in Germany. He first carried on experimental work in connection with the timing of projectiles, after which he spent some time in the making of "philosophical" instruments.

In 1874, Mr. Holtzer engaged in the manufacture of certain simple electrical devices, under the firm name of Holtzer & Newell, and a year later he established a small business of his own, dealing in electrical devices. In 1885, he purchased some property in Brookline, which he remodeled for manufacturing purposes.

The firm devoted the first years of its existence to an expanding group of electrical devices. To the line of bells, alarms, and annunciators were added gas lighters, magneto ringers, telephones, to which were added later intercommunicating systems, time clocks, hospital signaling systems, nurses' call systems, doctors' paging, fire alarm systems, and factory calling systems.

The Holtzer-Cabot Company was incorporated under the present name in 1889, when its Boston office and salesroom were moved to a new and better location. In addition to marketing the products of the Brookline factory, the firm did a large amount of electrical contracting. In 1892, Mr. Cabot sold his interests in the firm to Mr. Holtzer, and the company withdrew entirely from the contracting business to devote its entire time and energies to manufacturing electrical apparatus.

In 1897 important changes were taking place in the field of telephone operation, and the Company began the design of a noiseless telephone charging generator of special construction, for charging the batteries, while connected with the switchboard, from the generators. Coincident with this was the development of central energy ringing units, giving alternating current for ringing bells, for selective ringing on party lines, and for supplying various signals, thus increasing the capacity of the operators for handling calls. At this time an office building of four stories was erected adjoining the plant, and later, in 1899, additional manufacturing space in the shape of a four-story wing was erected, followed shortly by a second wing of the same size.

In 1913 plans were completed for a modern plant, which was finally completed and occupied in 1915. The building consists of a main structure of concrete, six stories high, and an annex of seven stories containing the service section and certain manufacturing departments. The whole plant contains 150,000 square feet of floor space and is conveniently located, both for the employees and for customers.

The products of the Holtzer-Cabot Company for schools, etc., are marketed almost exclusively through branch offices under the management of its own executives, the selling being done by trained electrical engineers in the firm's employ. The oldest branch office is that in Chicago, which was established in 1899, and handles all of the company's products in thirteen western states. Additional offices are found in New York City, Philadelphia, Minneapolis, Detroit, Baltimore, Pittsburgh, Cleveland, and Kansas City.

### TWO LARGE FIRMS COMBINE

Our readers will be interested in the announcement of a merger of the two largest concerns in America engaged in the complete furnishing and equipping of hotels, restaurants, clubs, and institutions. These two companies, Albert Pick and Co., of Chicago, and L. Barth and Son, Inc., of New York, have been for years growing rapidly along exactly the same lines. Each of them was founded over fifty years ago by the father of the present proprietor and has developed from a very small beginning to a business of gigantic proportions.

The two houses are, today, jointly doing a business in excess of \$25,000,000 a year and employ more than 2,500 people.

Albert Pick and Co., the larger of the two concerns, was founded in 1857 by the father of the present head of the business, as a small crockery and glassware store. In 1896, when Mr. Albert Pick, the present head of the business, formed a partnership with Mr. Jos. M. Finn under the name of Albert Pick and Company, the total sales were only about \$90,000. Since that time the business has constantly increased both in volume and in scope. Today Albert Pick and Co. carry thousands of items, including furniture, floor coverings, drapes, kitchen equipment and utensils, restaurant, cafeteria, and lunchroom equipment, chinaware, glassware, silverware, linens, soda fountains and accessories, janitors' supplies and sundries. A considerable portion of this merchandise is manufactured in their own factories. They occupy three large buildings in Chicago, and one in Bridgeport, Conn. In addition to a large sales force, the company has organized a staff of engineers, interior decorators, and consultants which enable it to undertake the complete furnishing and equipping of a hotel, restaurant, club, or institution, supplying every item necessary to change the bare building into an establishment ready for operation.

L. Barth and Son, Inc., of New York, was founded in 1868 by the father of Mr. Harry Barth, its present head, and has a history closely parallel to that of Albert Pick and Company.

The name of L. Barth and Son, Inc., will be changed to L. Barth and Company, and Mr. Harry Barth will remain president, while Albert Pick and Co., will remain as at present. The two companies will immediately consolidate operations and purchasing so as to secure all the advantages of the merger and the best possible service to their patrons. The possibilities for future growth of the newly merged companies is evident from the fact that while they were the two largest concerns of the kind in America, yet their combined business does not, at present, equal 10 per cent of the total volume of such business in the United States.

### NEW TRADE PUBLICATIONS

**Issue Catalog of Small Tools.** The Greenfield Tap & Die Corporation, of Greenfield, Mass., has issued its new Catalog No. 49, illustrating and describing a complete list of small tools, including screw plates, taps and dies, twist drills, reamers, screw slotting cutters, gauges, pipe tools, and miscellaneous machine tools. The catalog lists some five hundred different assortments of tools.

The excellent character of the products made by this firm are due to the great care taken to insure accuracy, uniformity and quality in all the tools manufactured. It begins with the selection of steel, and advances through the various processes of manufacture to the final hardening and tempering and even the packing, so that no effort or expense is spared to insure reliability in the finished product.

A copy of the catalog will be sent to any school authority, or shop instructor, who requests it.

**Issue New Bargain Catalog.** The Albert Pick Company of Chicago, Ill., has just issued a new catalog, illustrating and describing a number of special winter features in school lunchroom and cafeteria equipment. The catalog lists dishes, silverware, paper napkins, table linen, attendants' uniforms, checking systems, electric food warmers, coffee urns, and waffle bakers.

**An Ideal Christmas Gift.** G. & C. Merriam Co. of Springfield, Mass., has issued a descriptive circular on its new Webster Collegiate dictionary for school and college use. This book is a fine specimen of bookmaking and contains 106,000 words and phrases, including new words, and 1,700 illustrations. It makes an ideal Christmas gift for the school boy or girl. It may be had in three kinds of binding—art canvas, fabrikoid, and full leather.

The firm is also marketing its New International Dictionary which is the supreme authority for the home, the school or the office. It contains 407,000 vocabulary terms, 6,000 illustrations and 12,000 biographical entries. The volume may be had in two different editions, regular or India-paper edition, and in four types of binding.

### Liberal Enough

"Did your son receive a liberal education at college?"

"Oh, yes. He doesn't believe in anything any longer."—New York Sun.



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